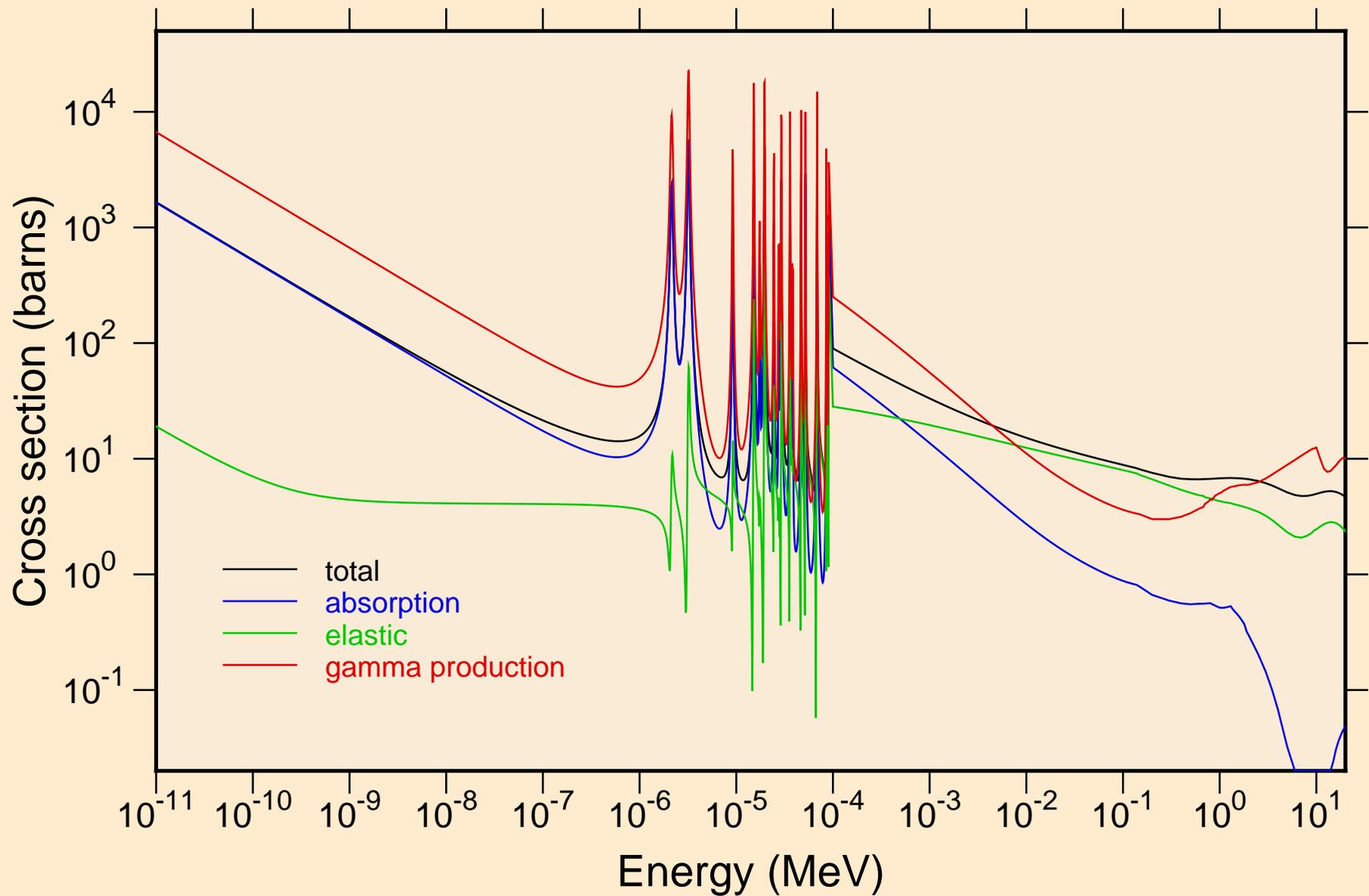


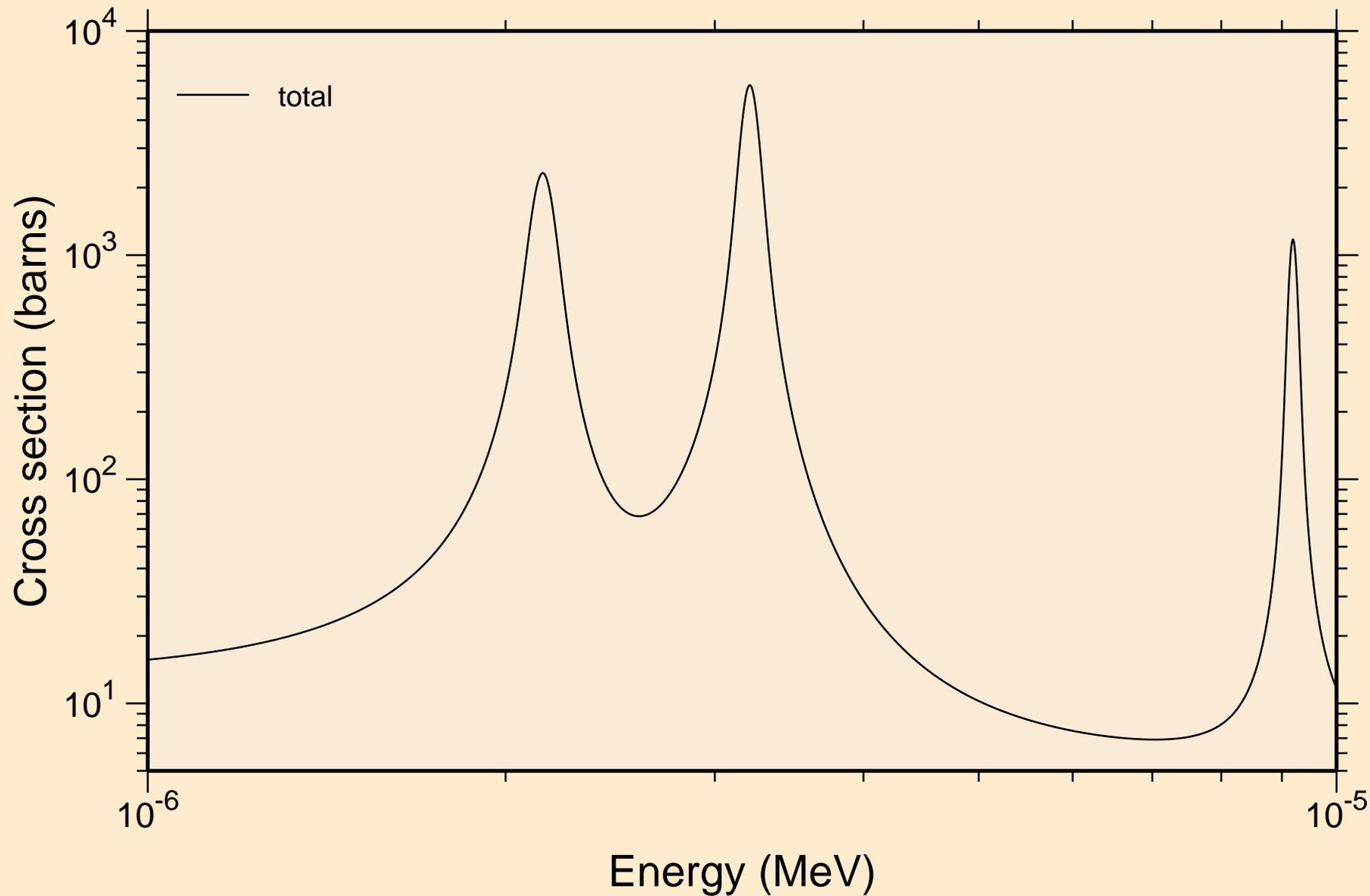
# ADVANCE CALCULATIONS

## Principal cross sections



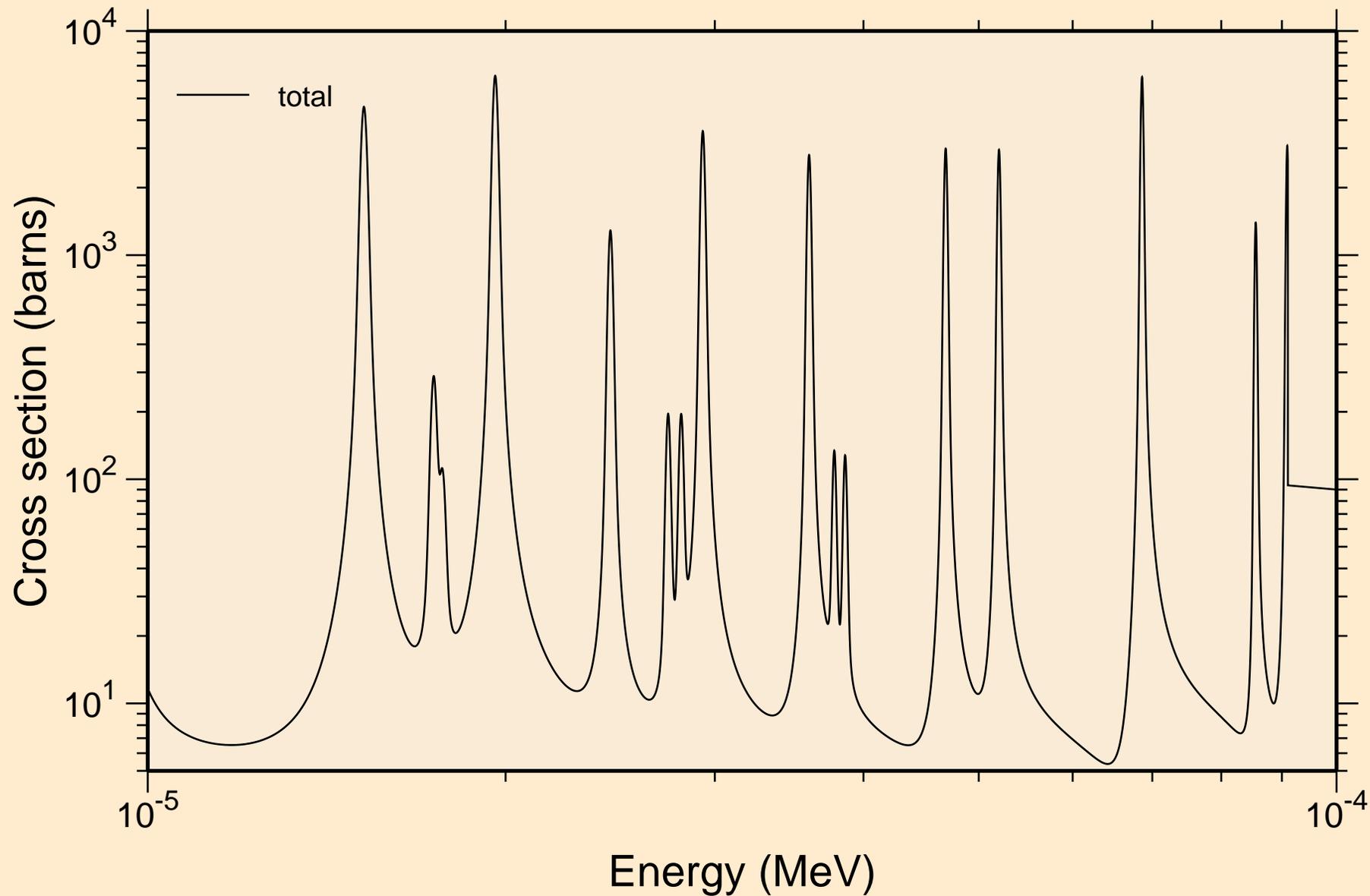
# ADVANCE CALCULATIONS

## resonance total cross section



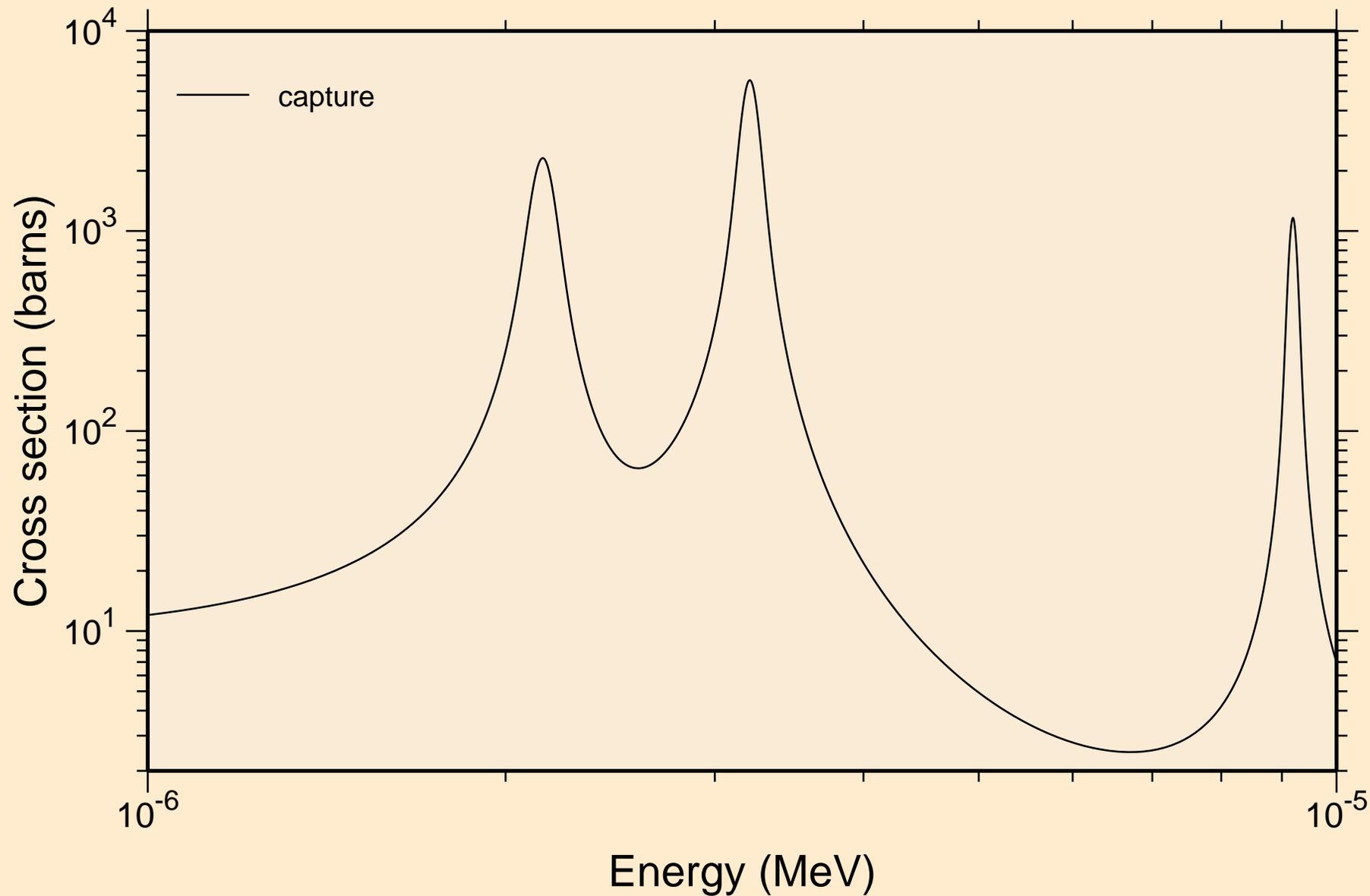
# ADVANCE CALCULATIONS

## resonance total cross section



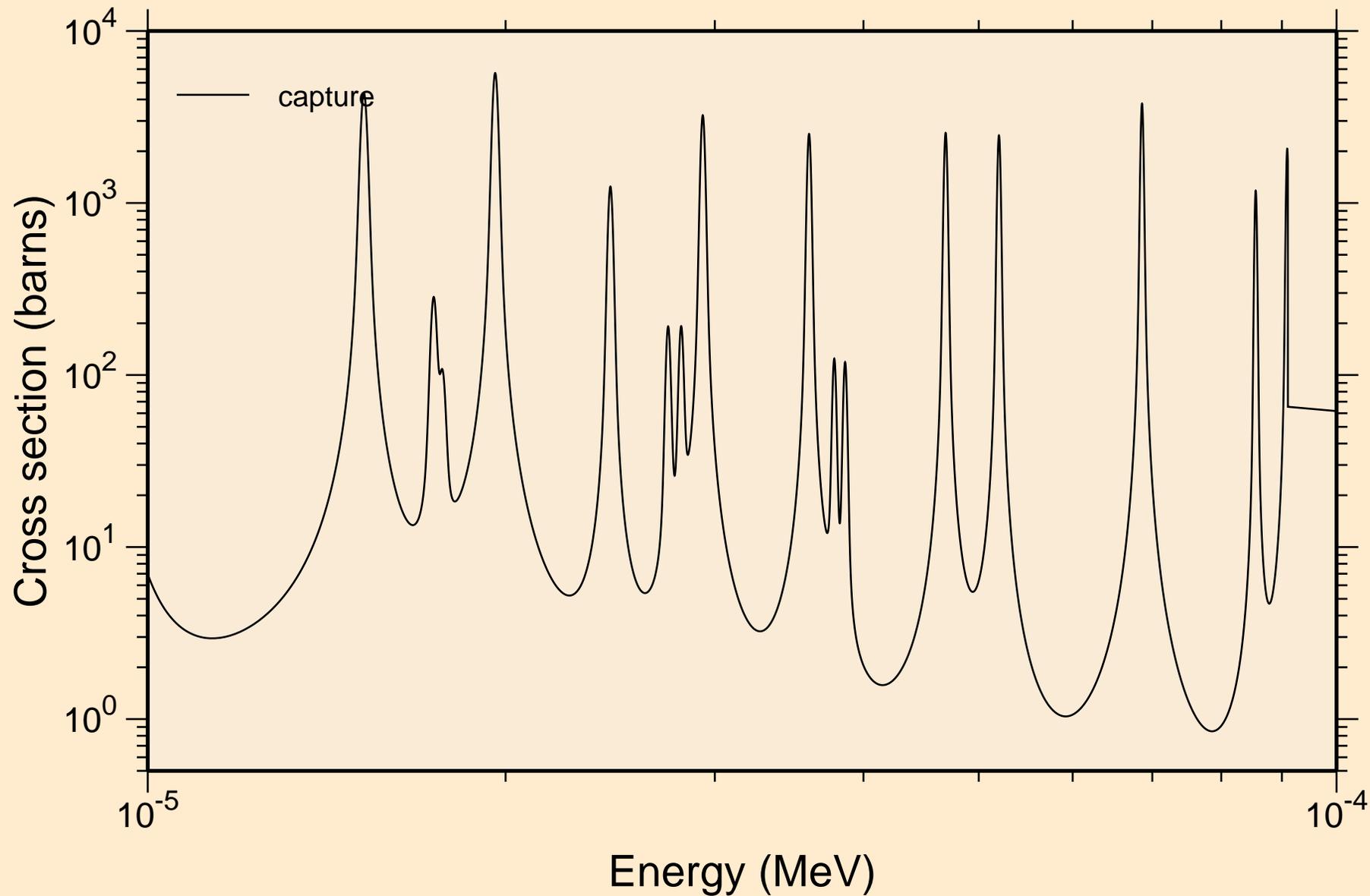
# ADVANCE CALCULATIONS

## resonance absorption cross sections



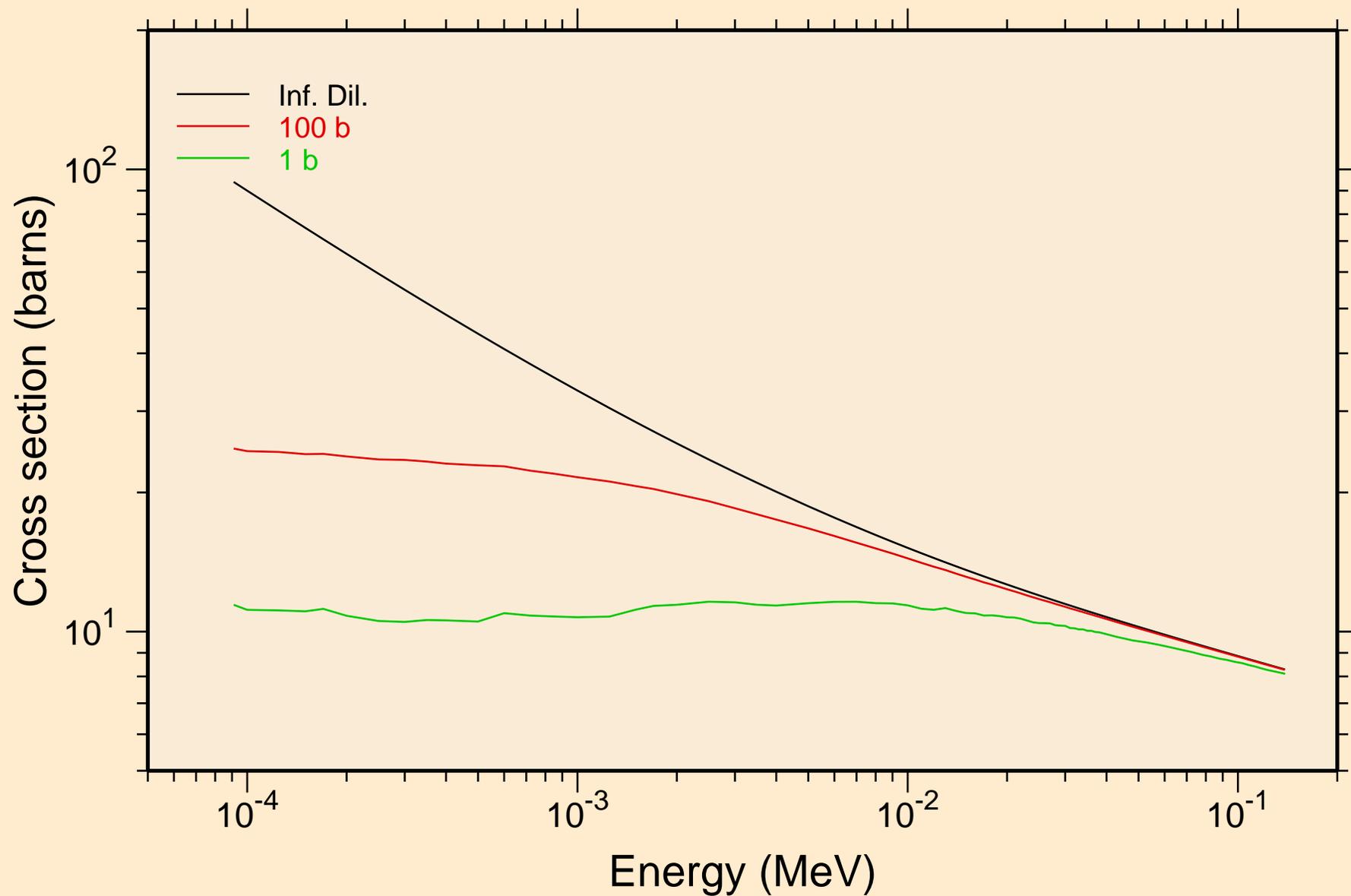
# ADVANCE CALCULATIONS

## resonance absorption cross sections



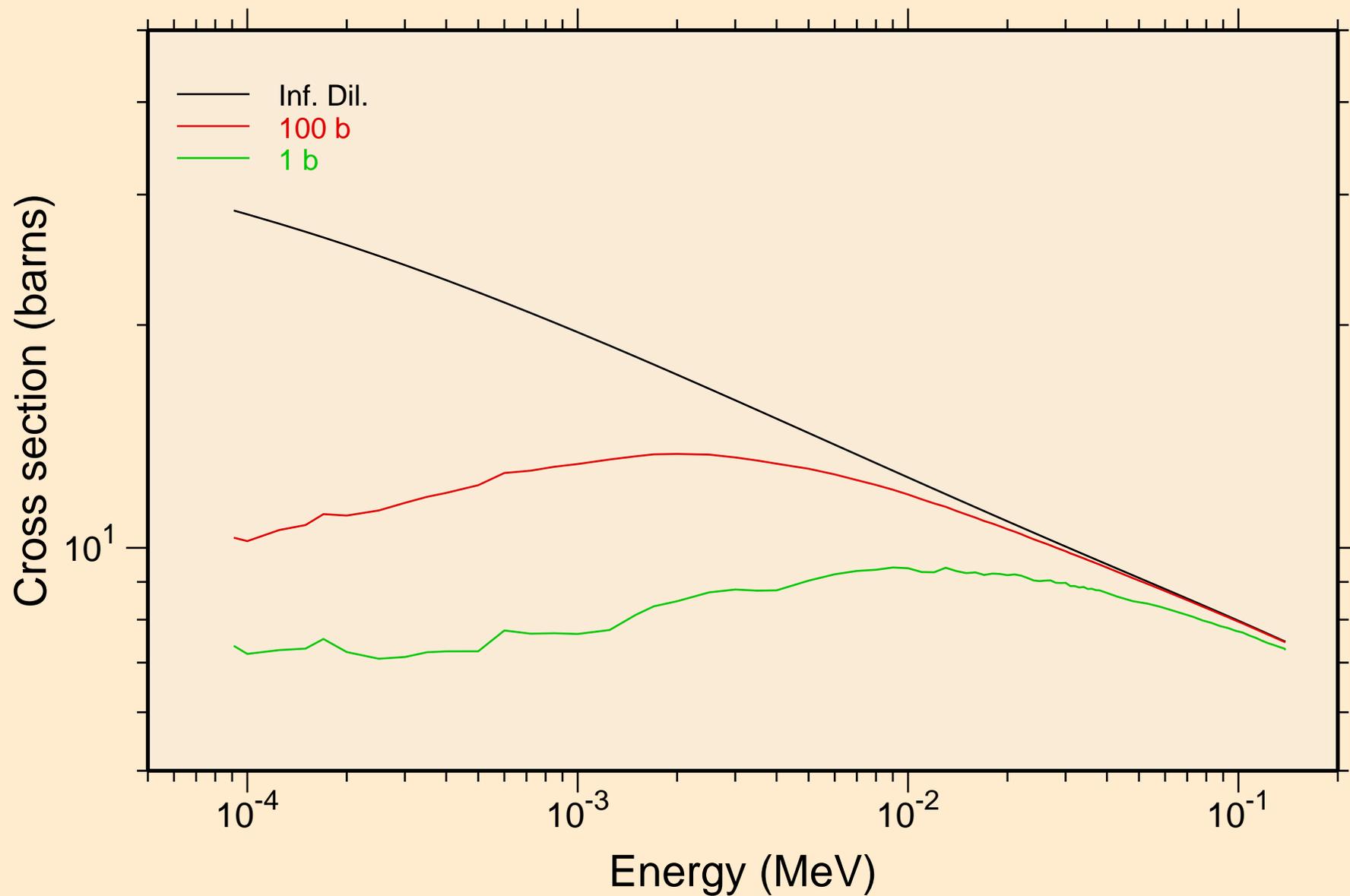
# ADVANCE CALCULATIONS

## UR total cross section



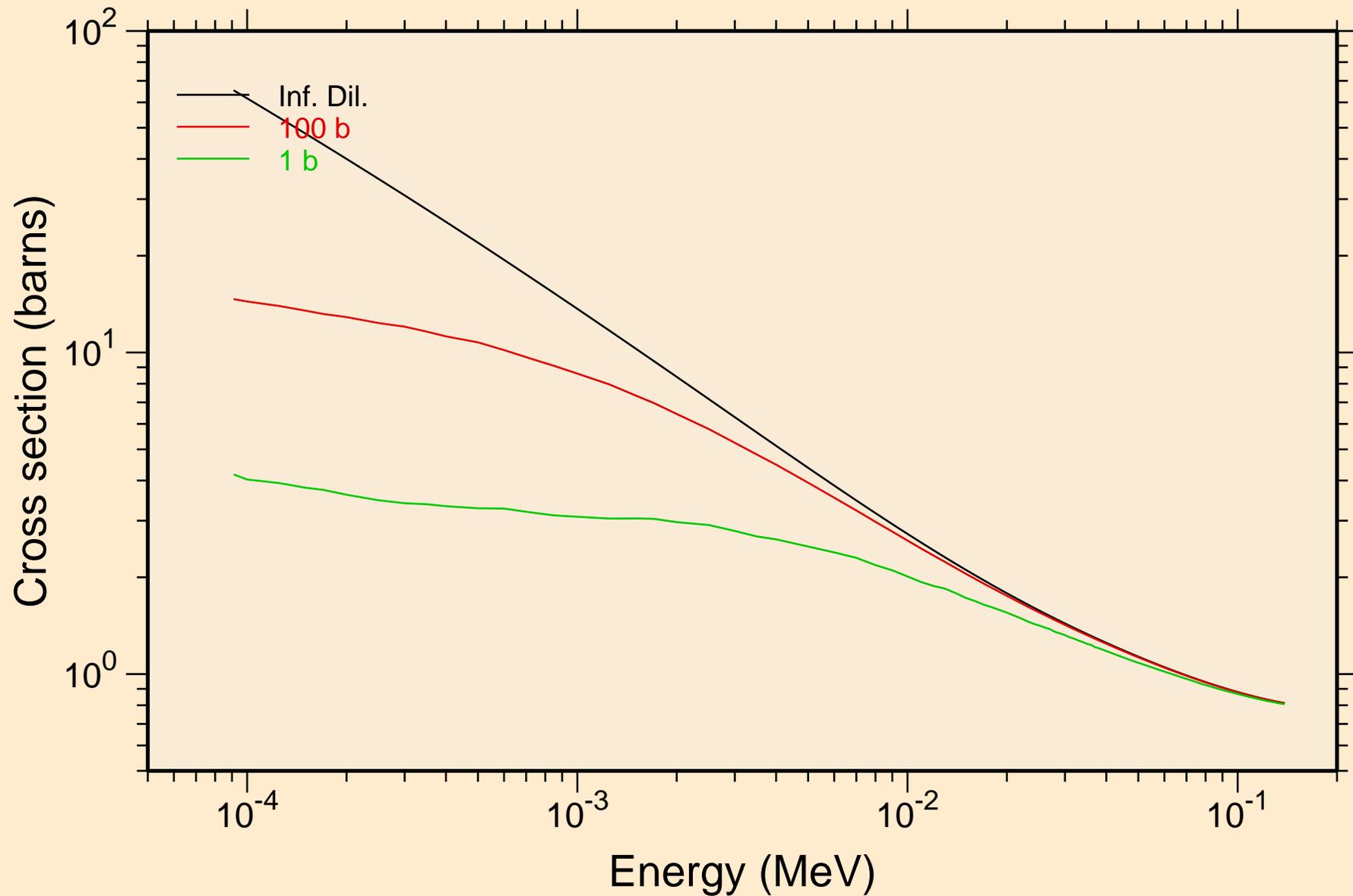
# ADVANCE CALCULATIONS

## UR elastic cross section



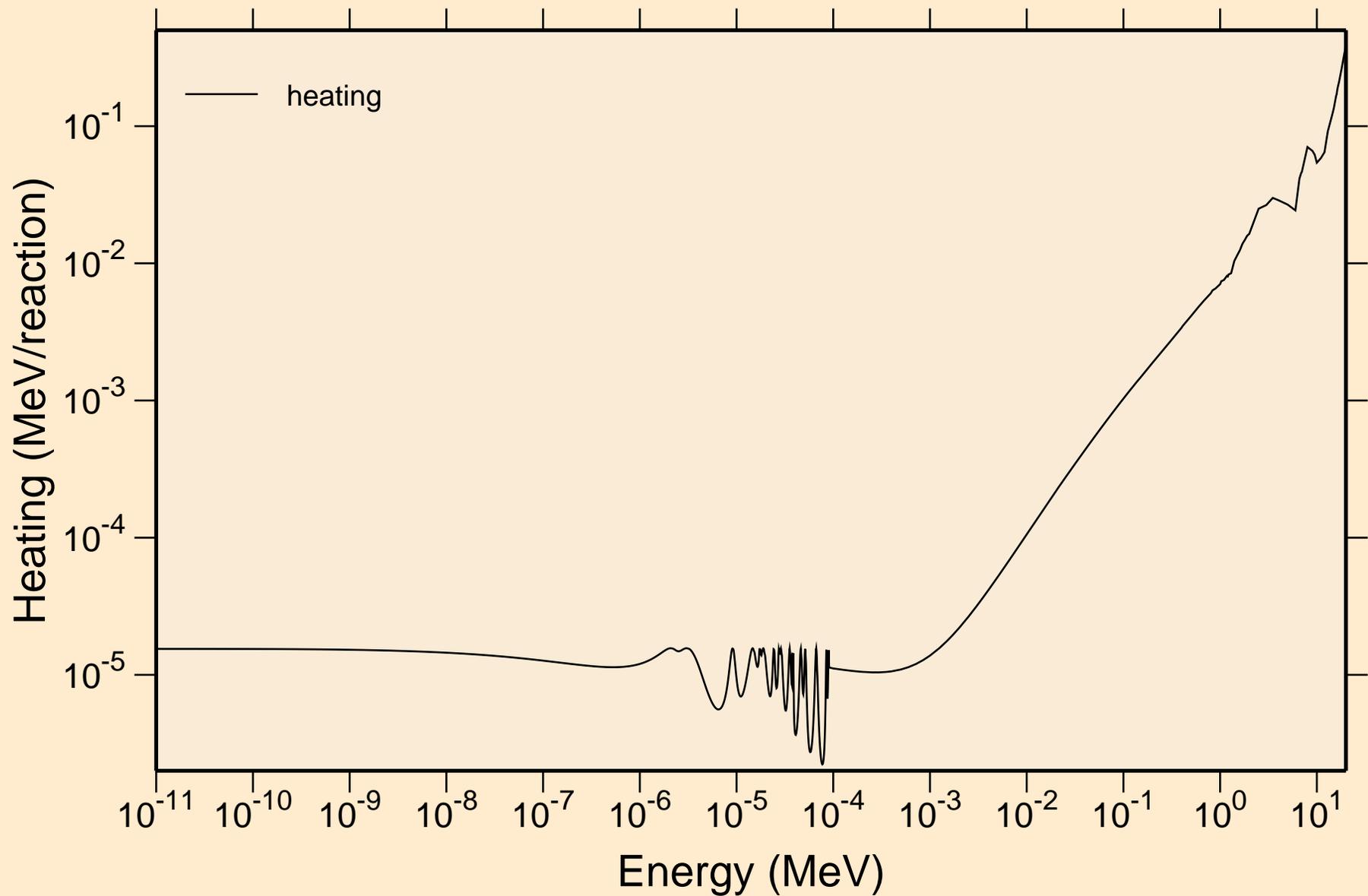
# ADVANCE CALCULATIONS

## UR capture cross section



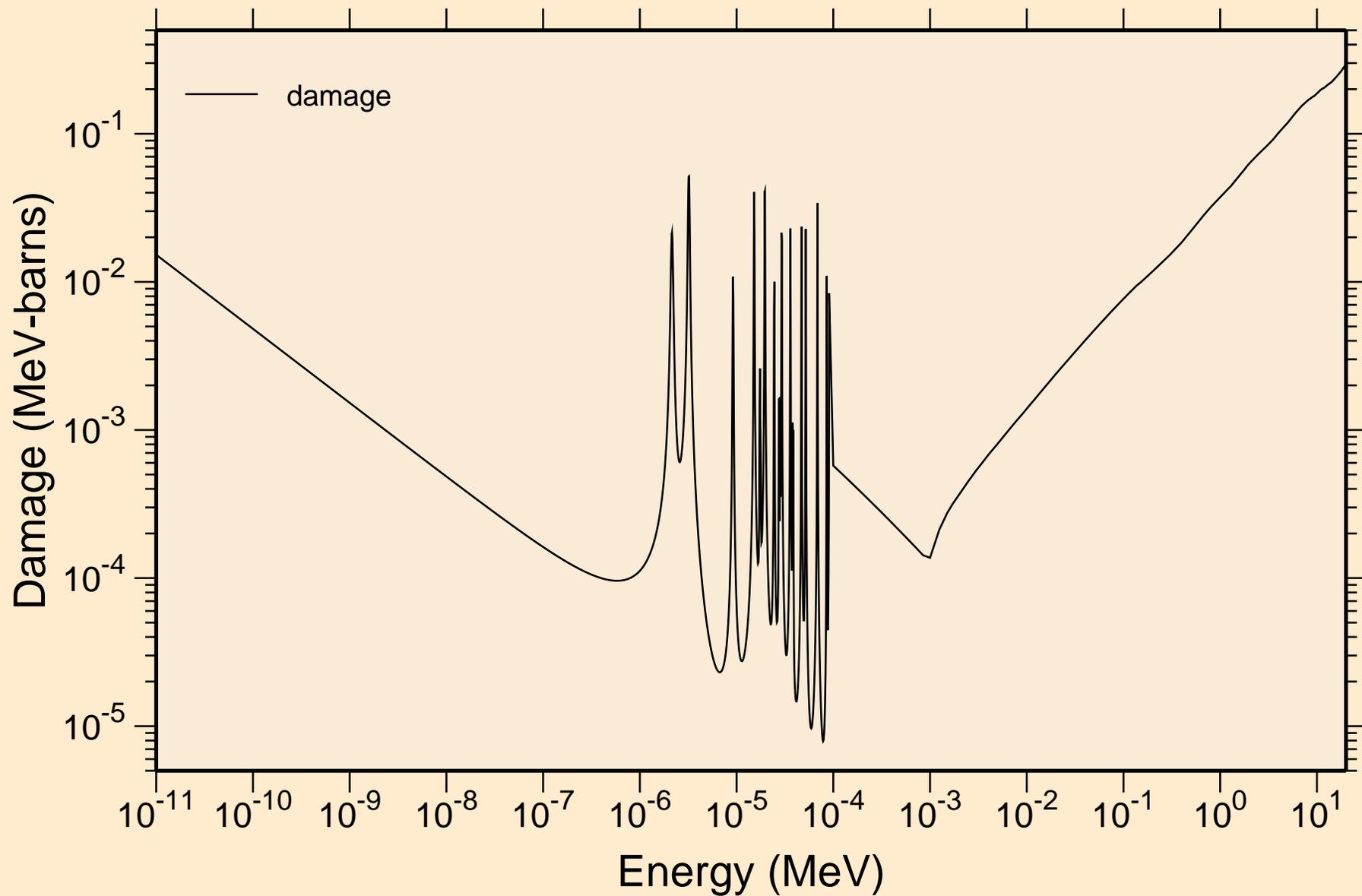
# ADVANCE CALCULATIONS

## Heating



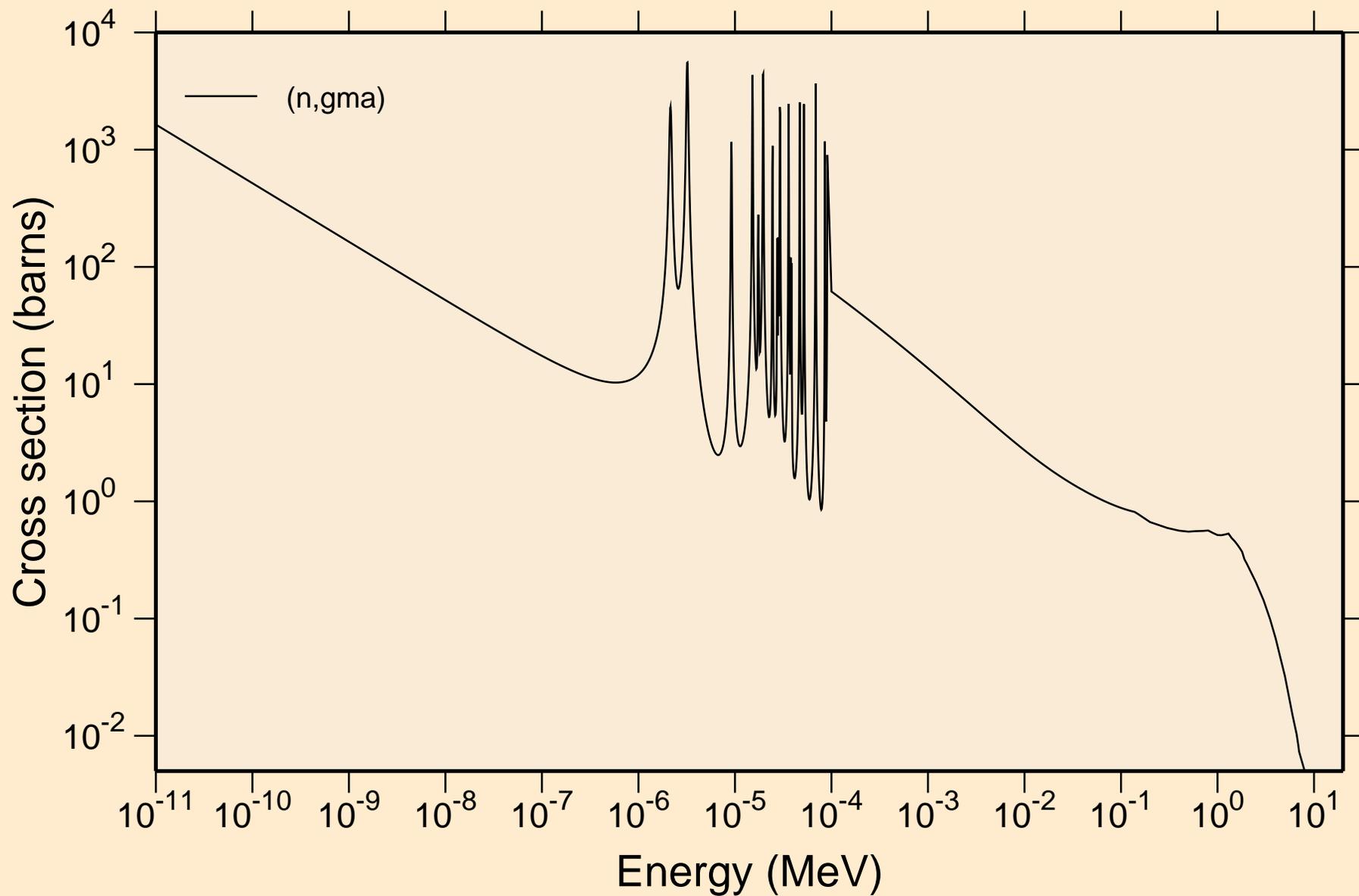
# ADVANCE CALCULATIONS

## Damage



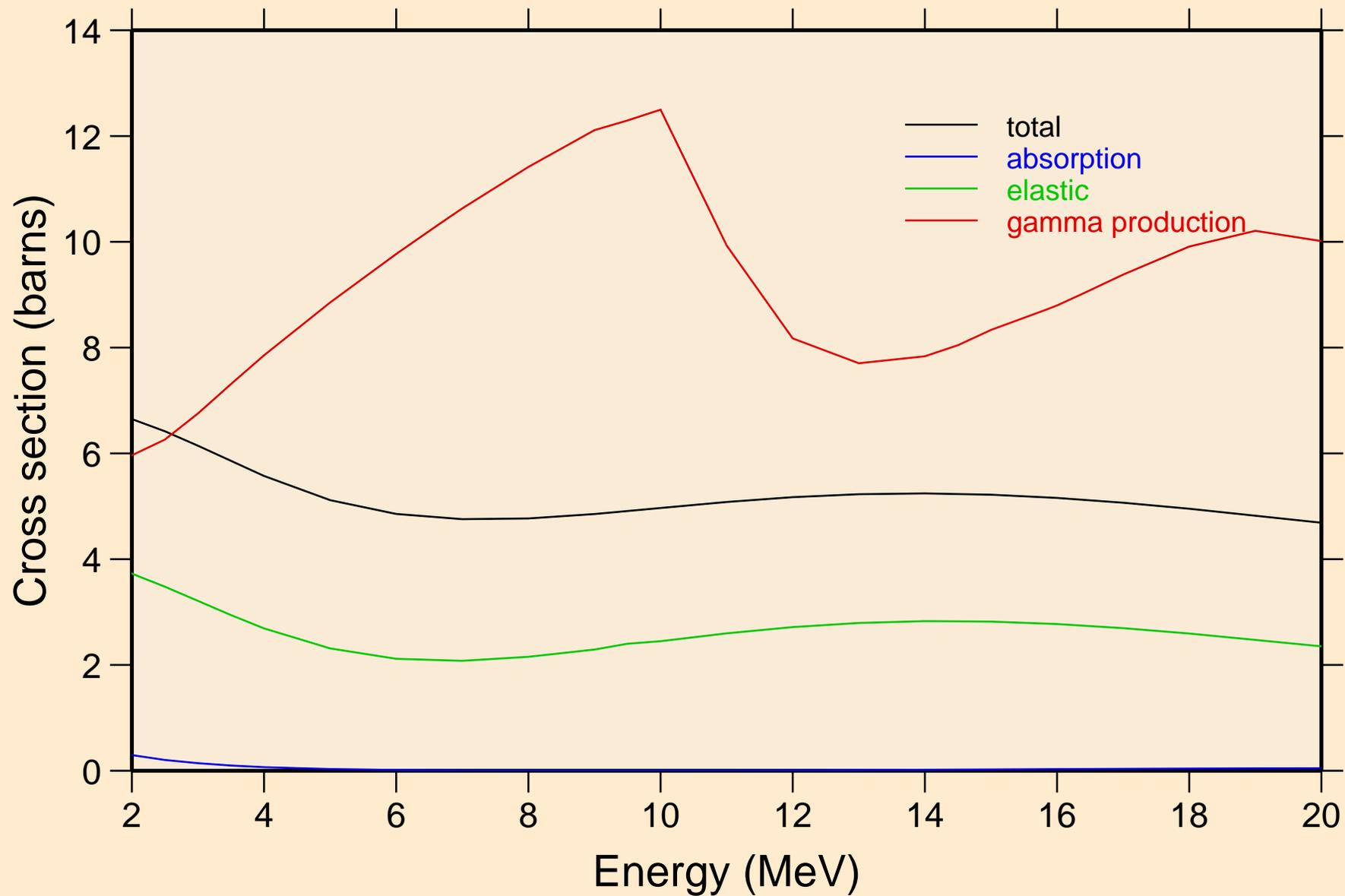
# ADVANCE CALCULATIONS

## Non-threshold reactions



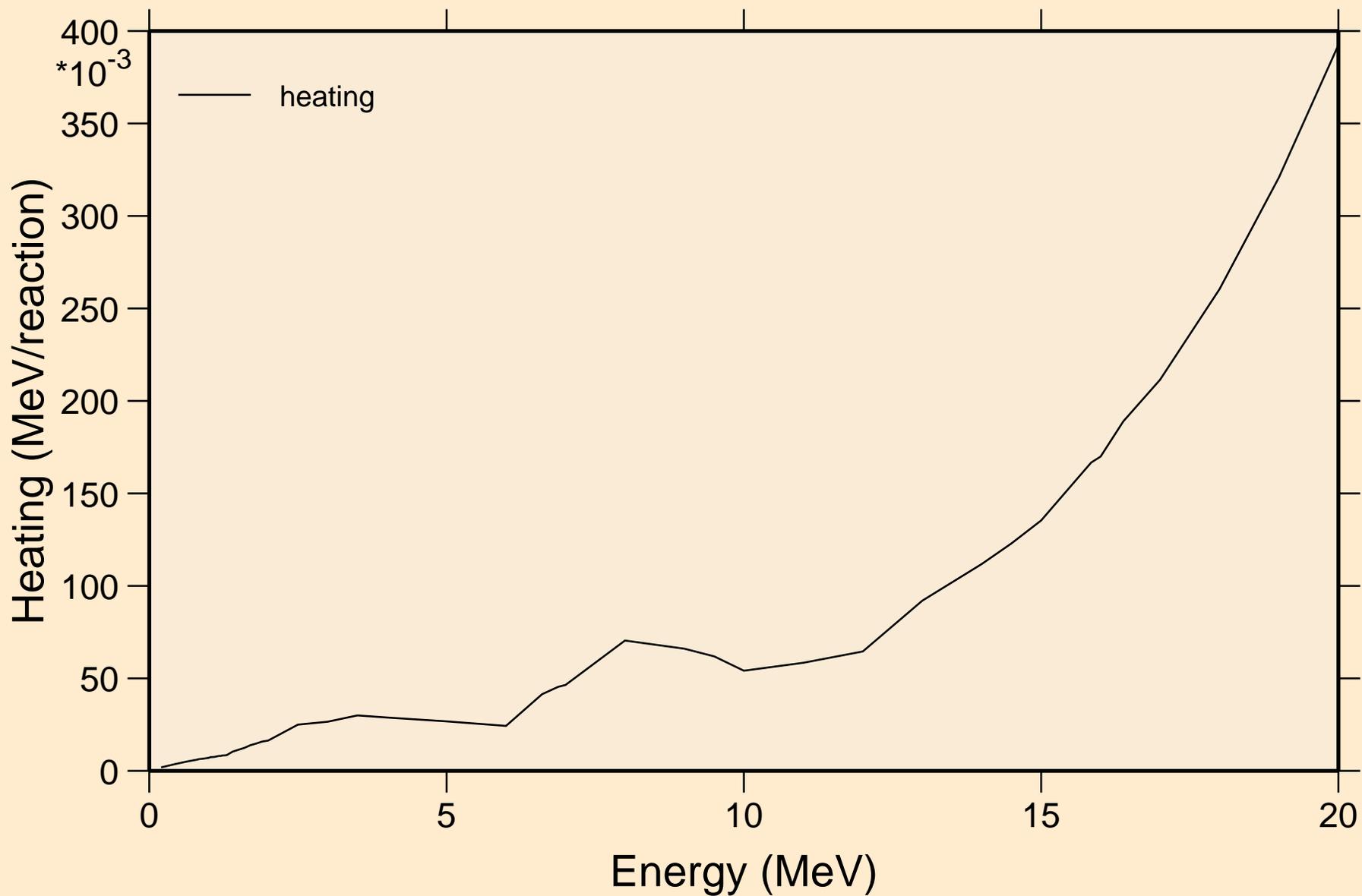
# ADVANCE CALCULATIONS

## Principal cross sections



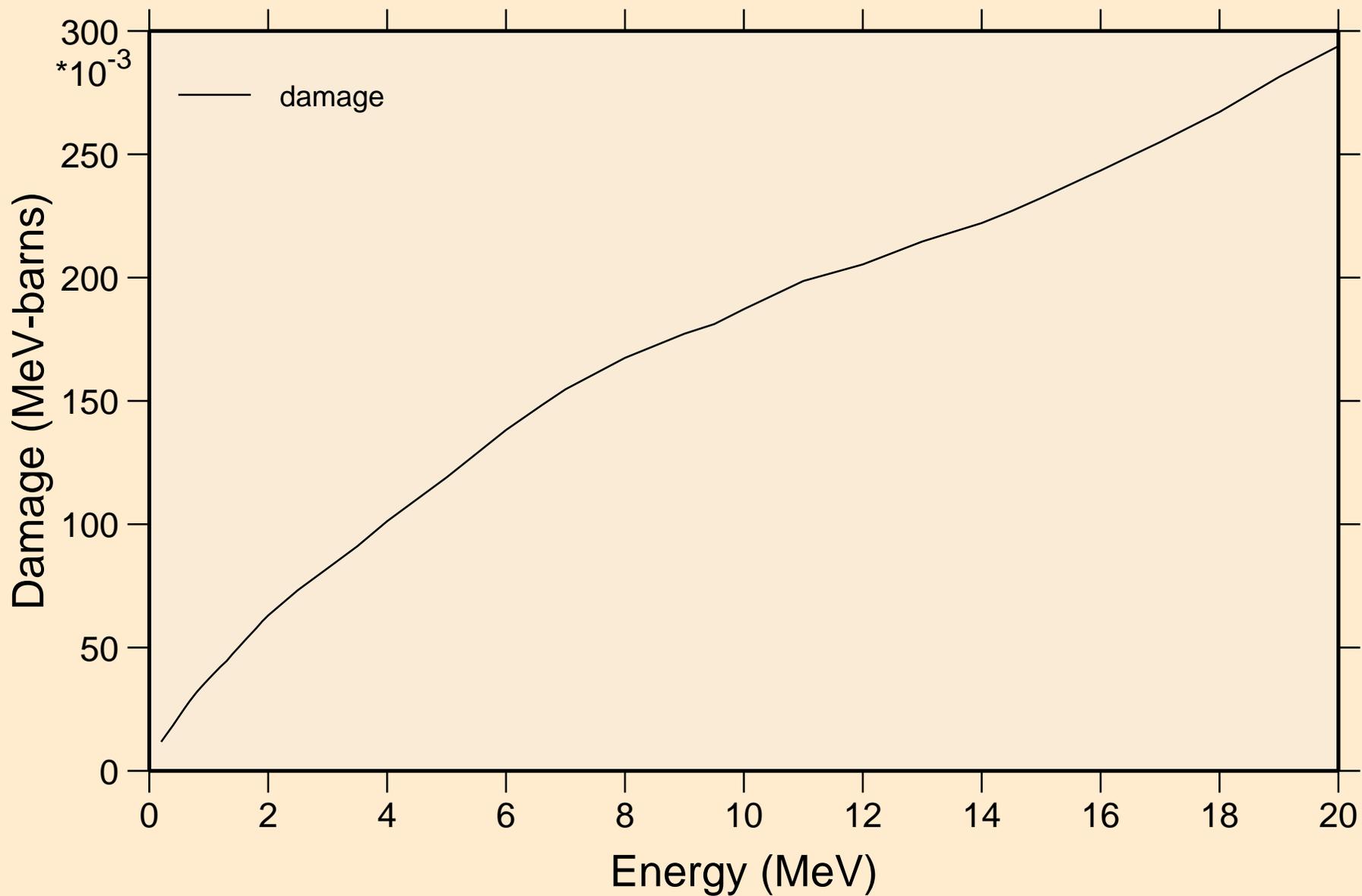
# ADVANCE CALCULATIONS

## Heating



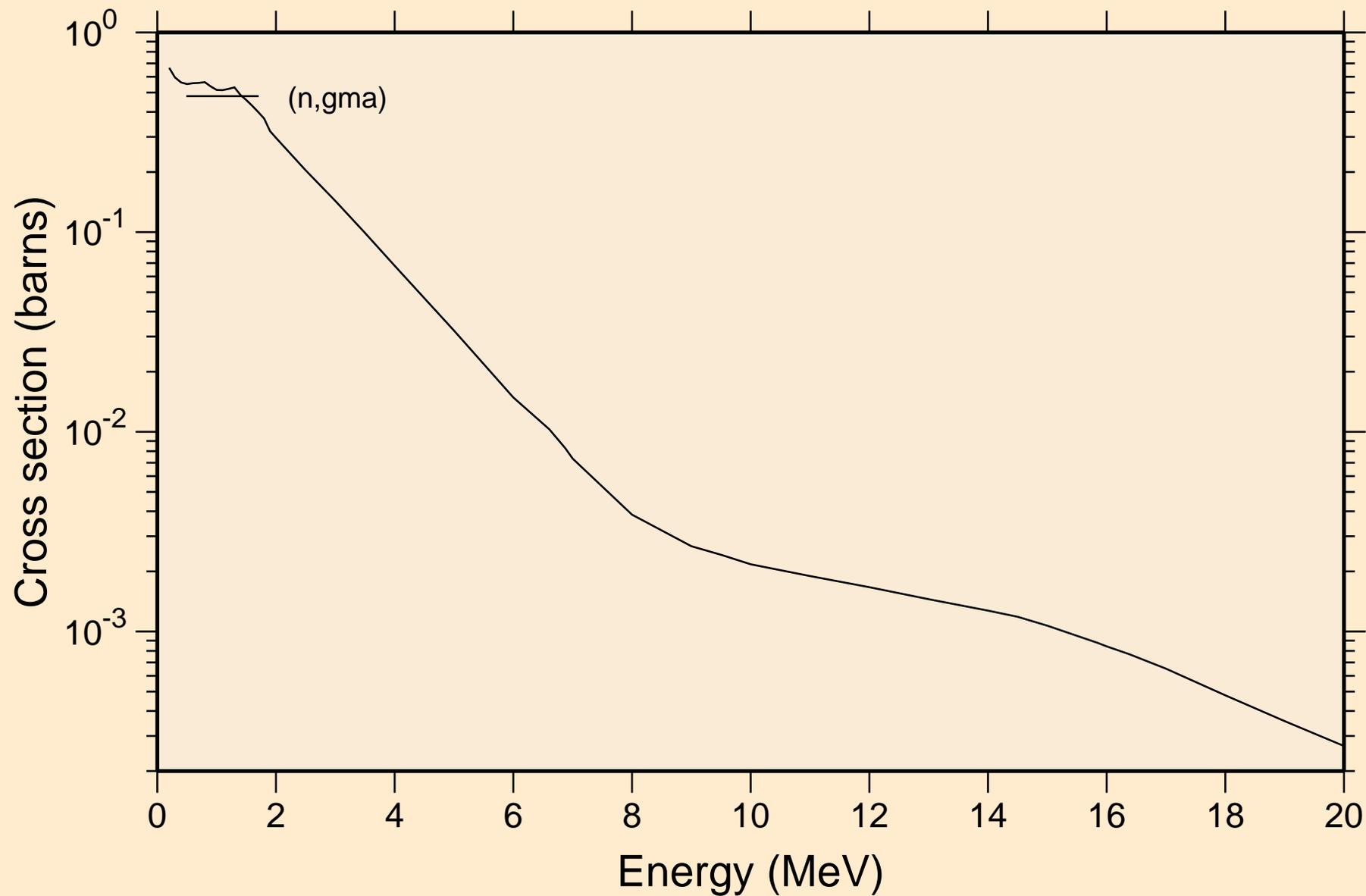
# ADVANCE CALCULATIONS

## Damage



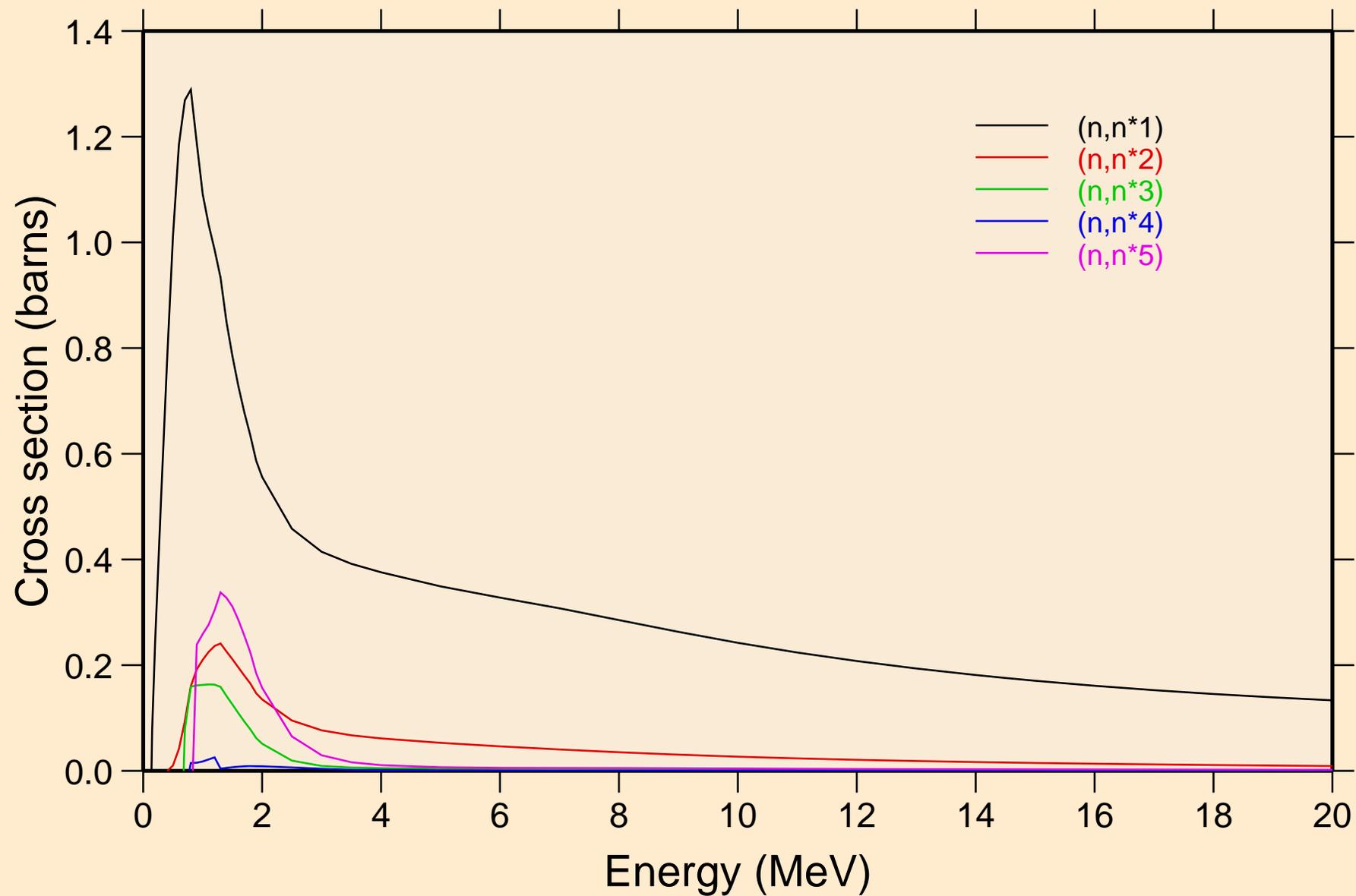
# ADVANCE CALCULATIONS

## Non-threshold reactions



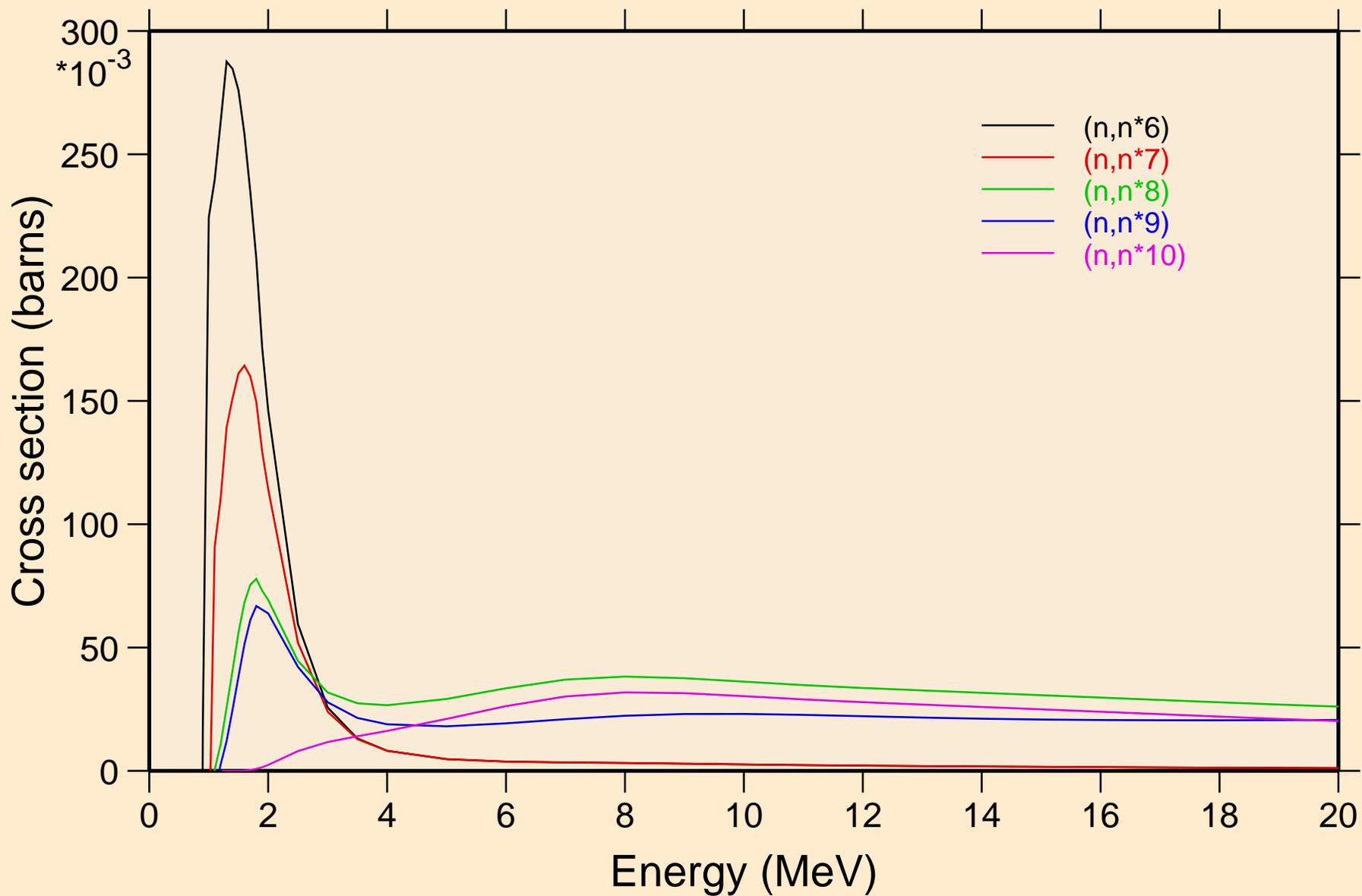
# ADVANCE CALCULATIONS

## Inelastic levels



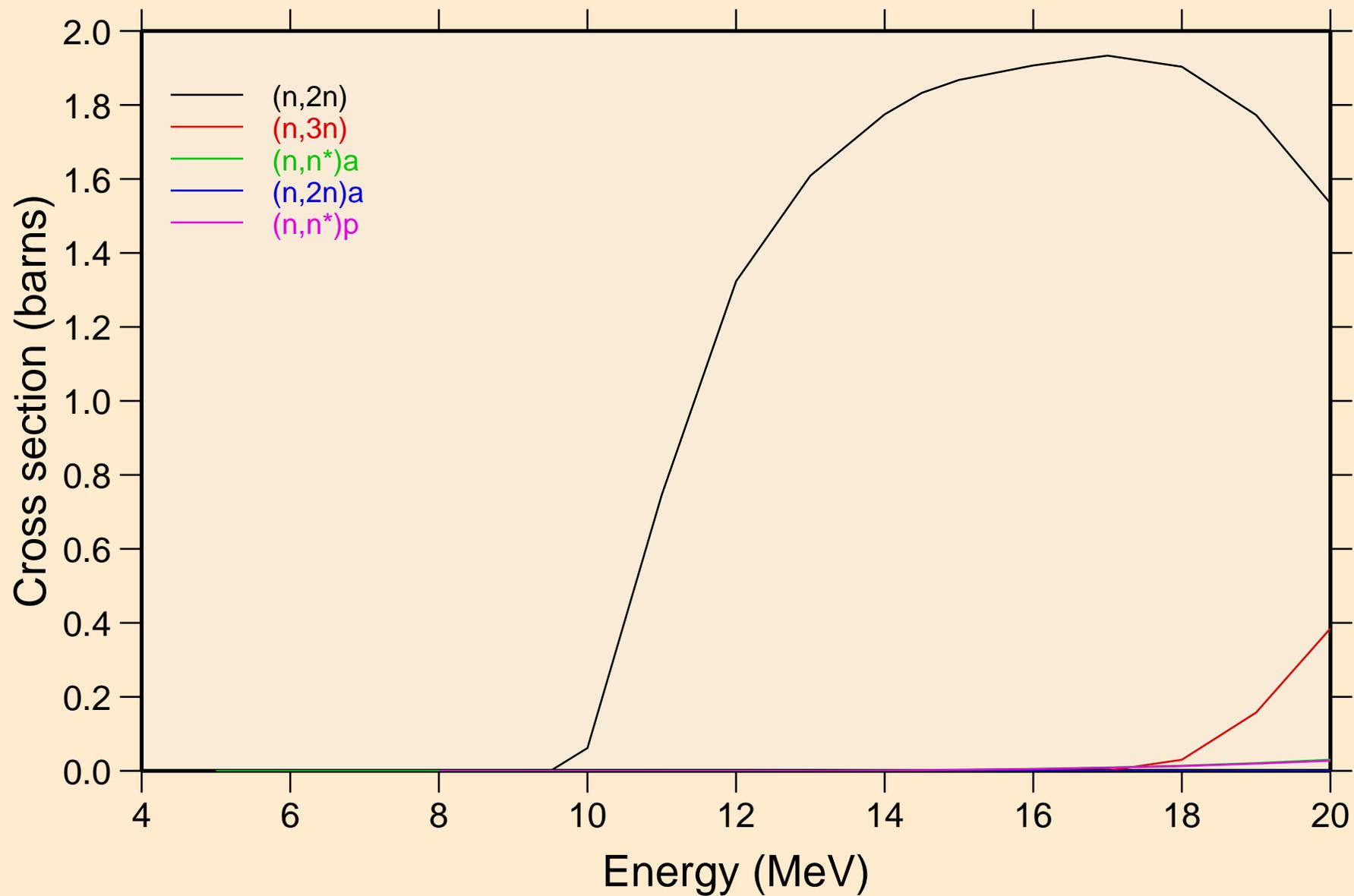
# ADVANCE CALCULATIONS

## Inelastic levels



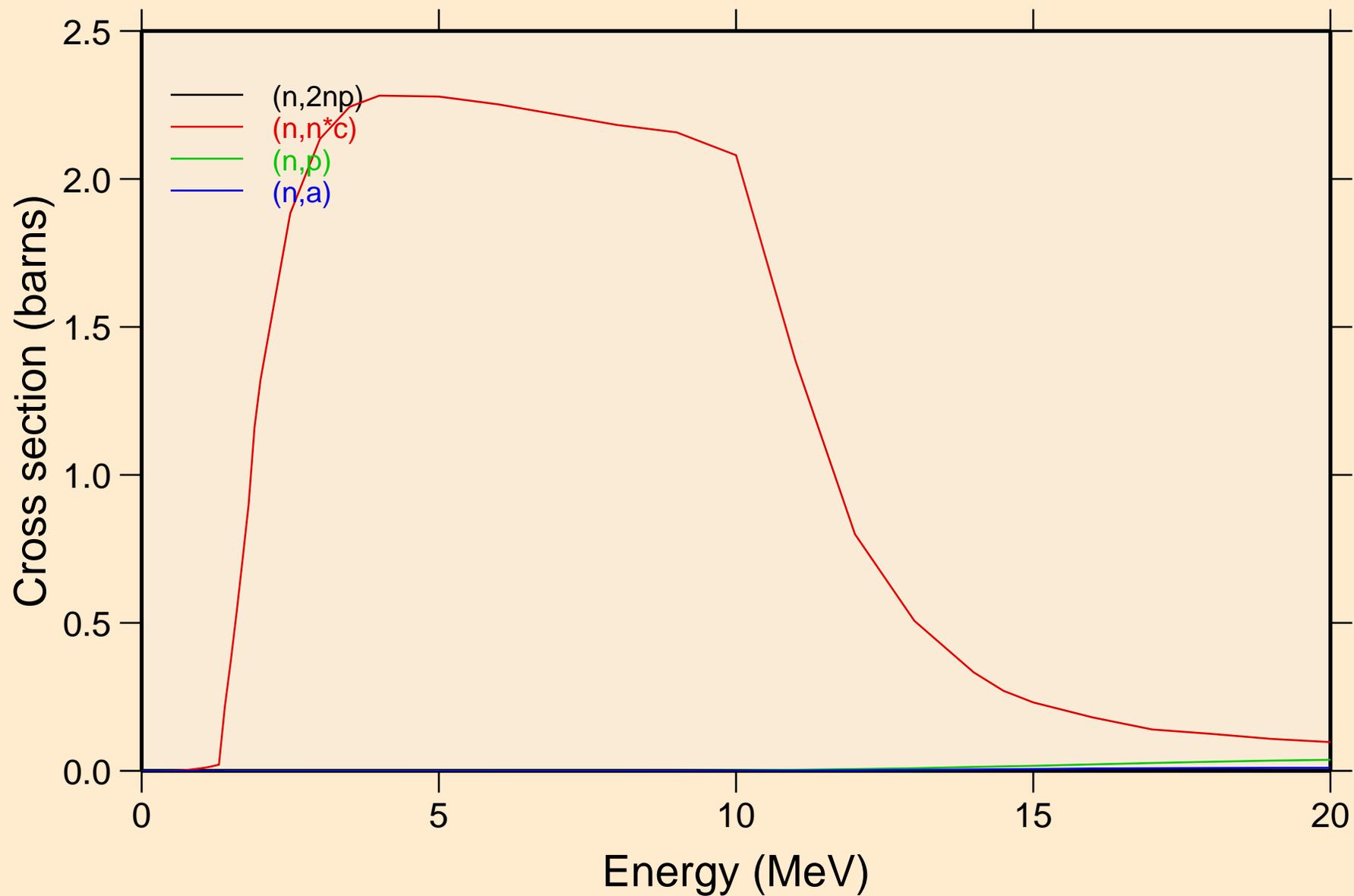
# ADVANCE CALCULATIONS

## Threshold reactions



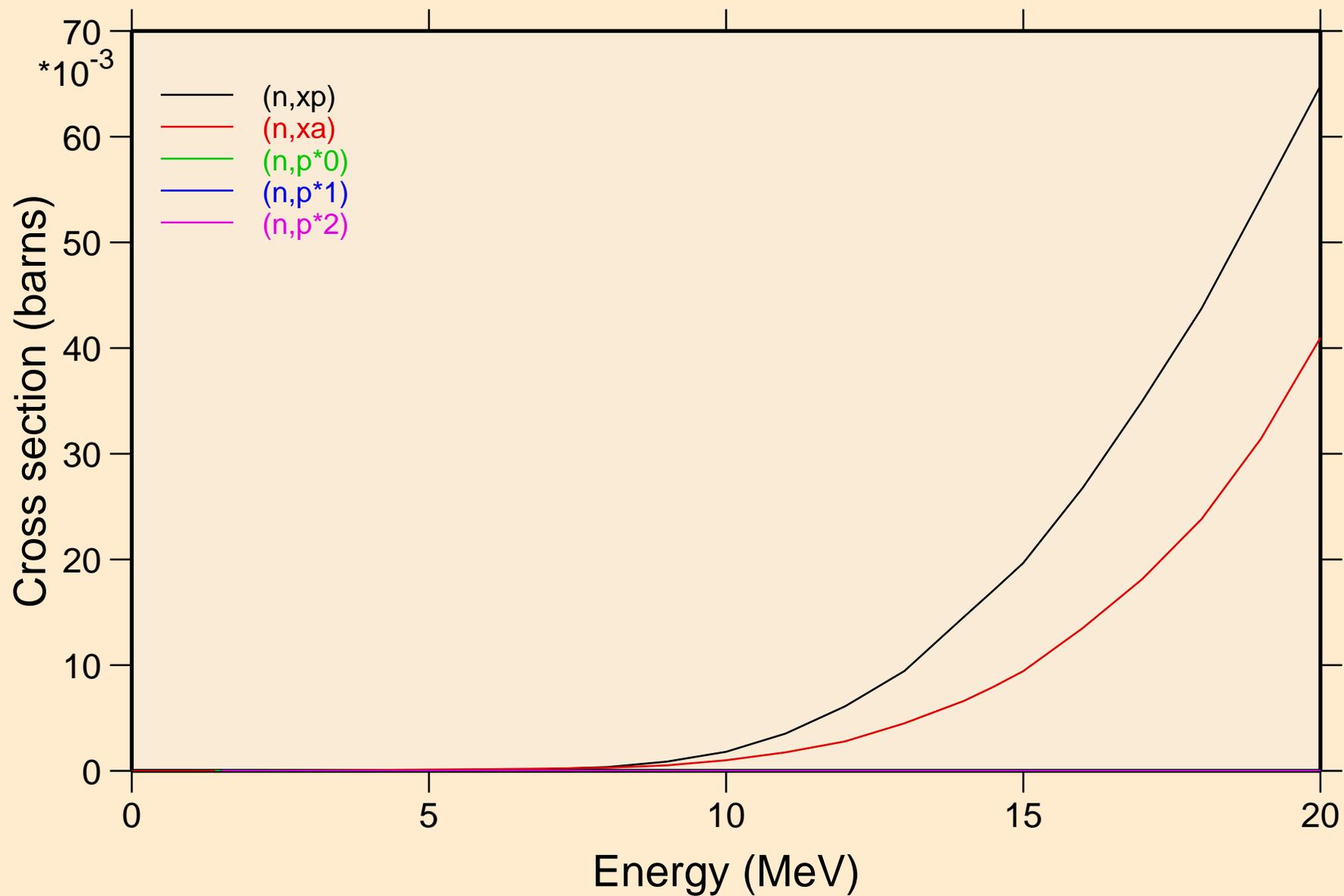
# ADVANCE CALCULATIONS

## Threshold reactions



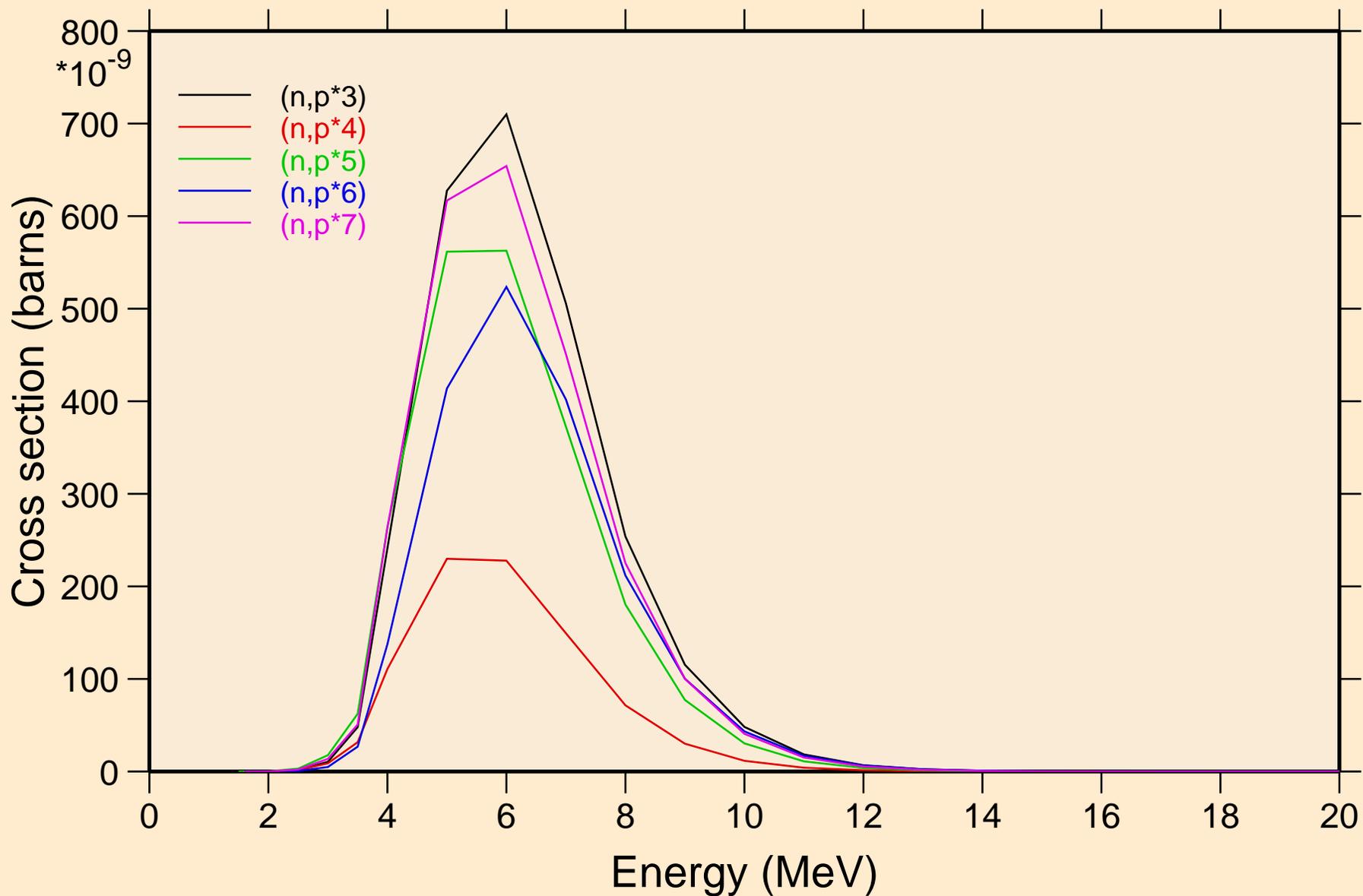
# ADVANCE CALCULATIONS

## Threshold reactions



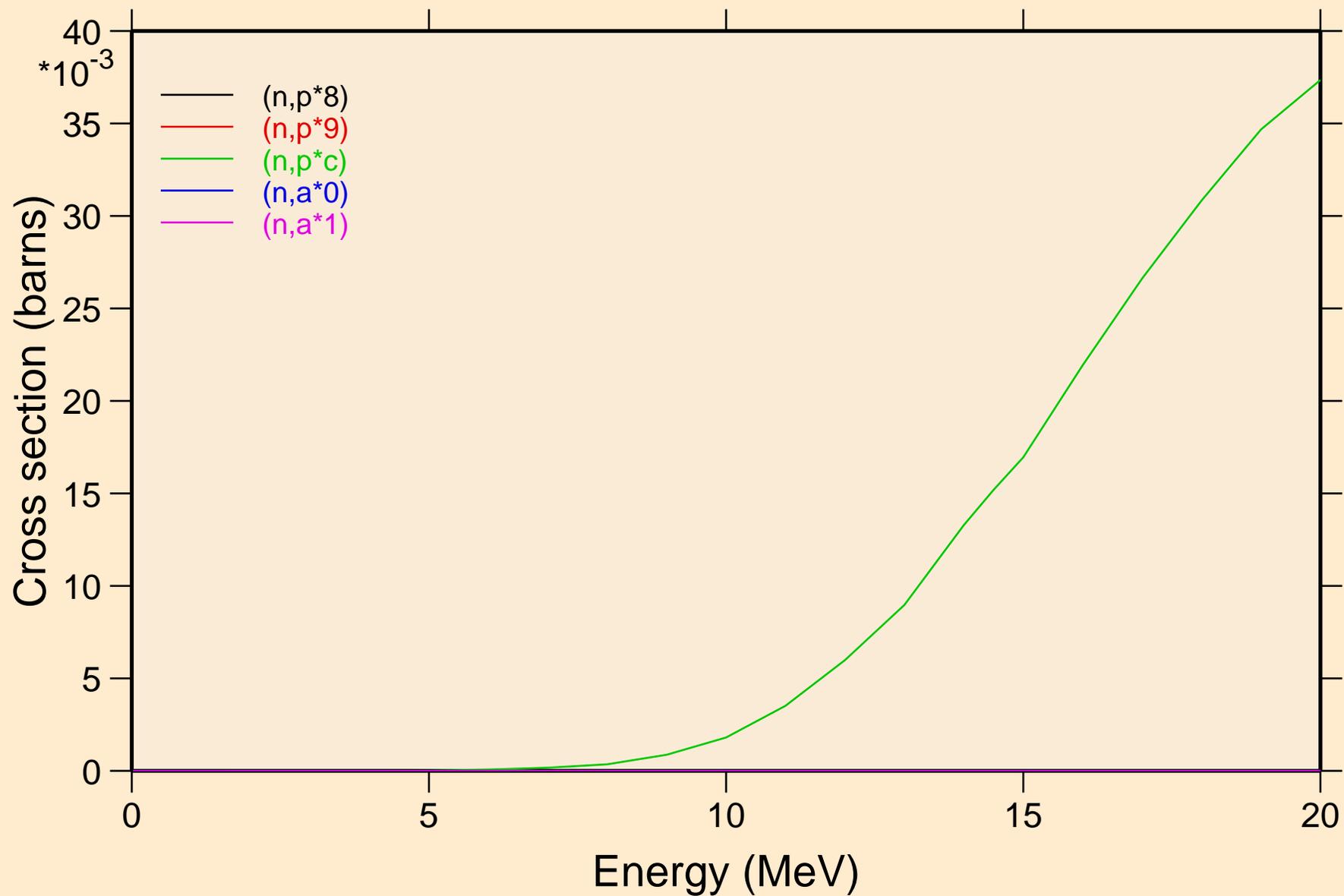
# ADVANCE CALCULATIONS

## Threshold reactions



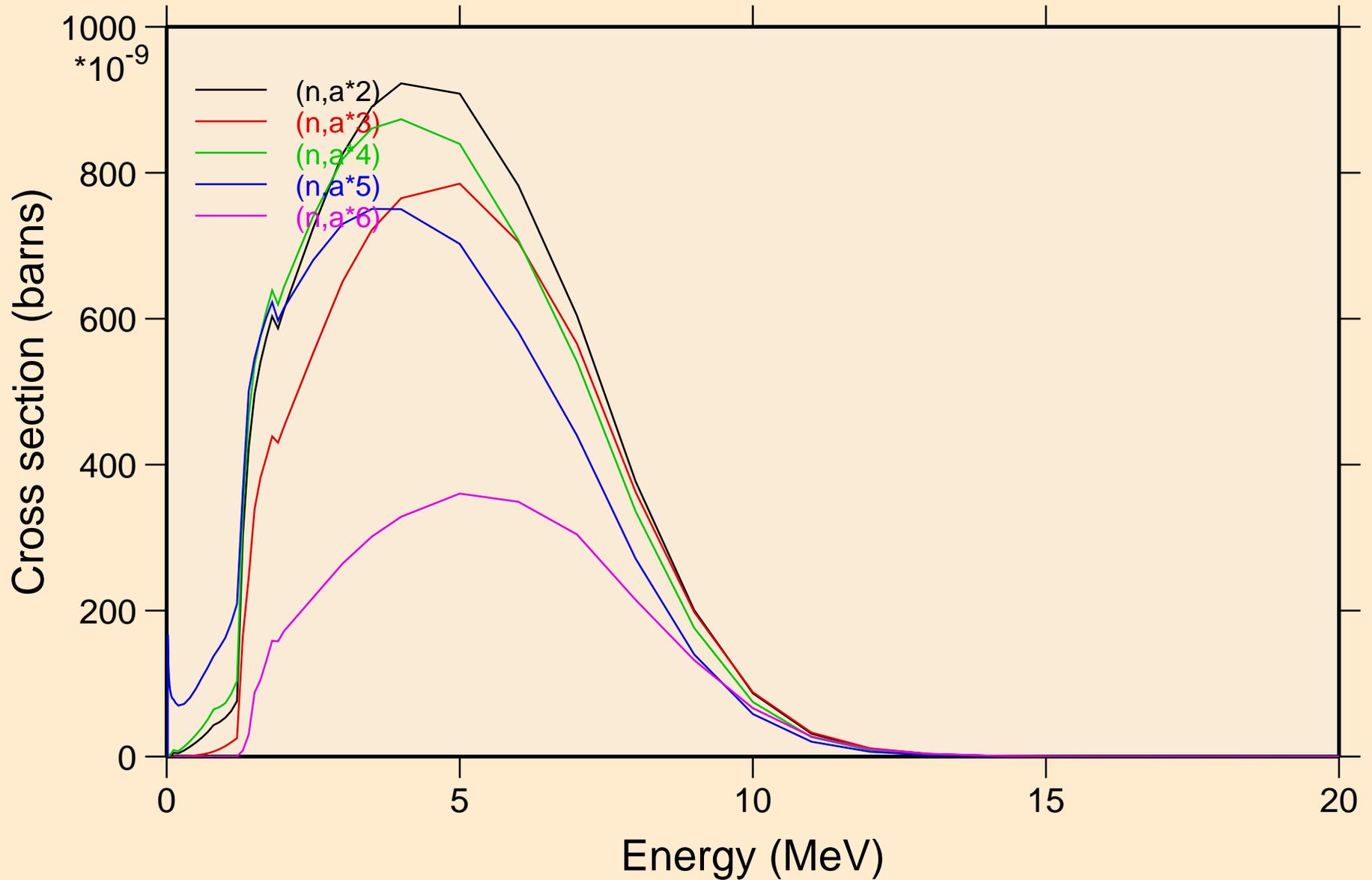
# ADVANCE CALCULATIONS

## Threshold reactions



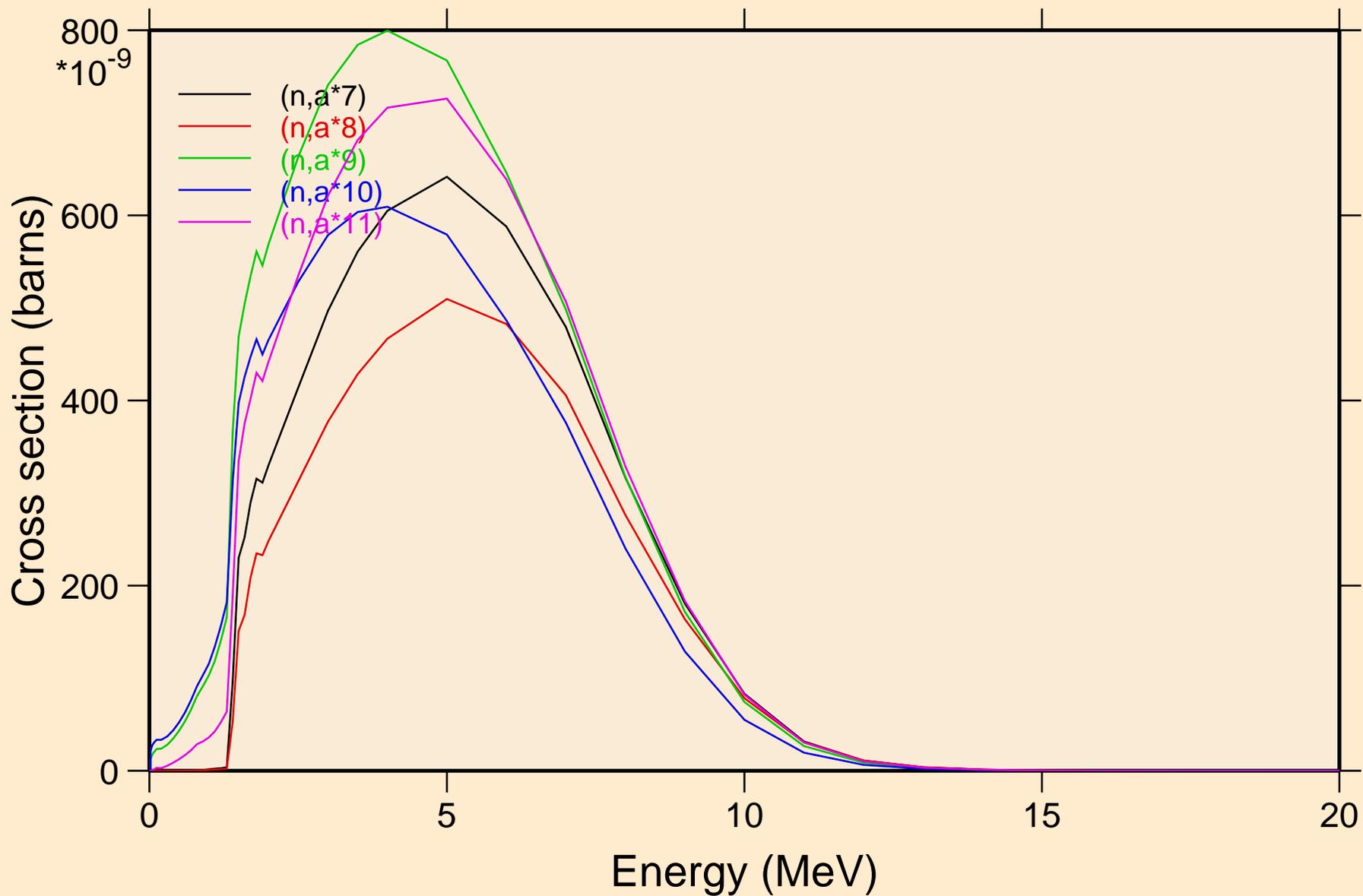
# ADVANCE CALCULATIONS

## Threshold reactions



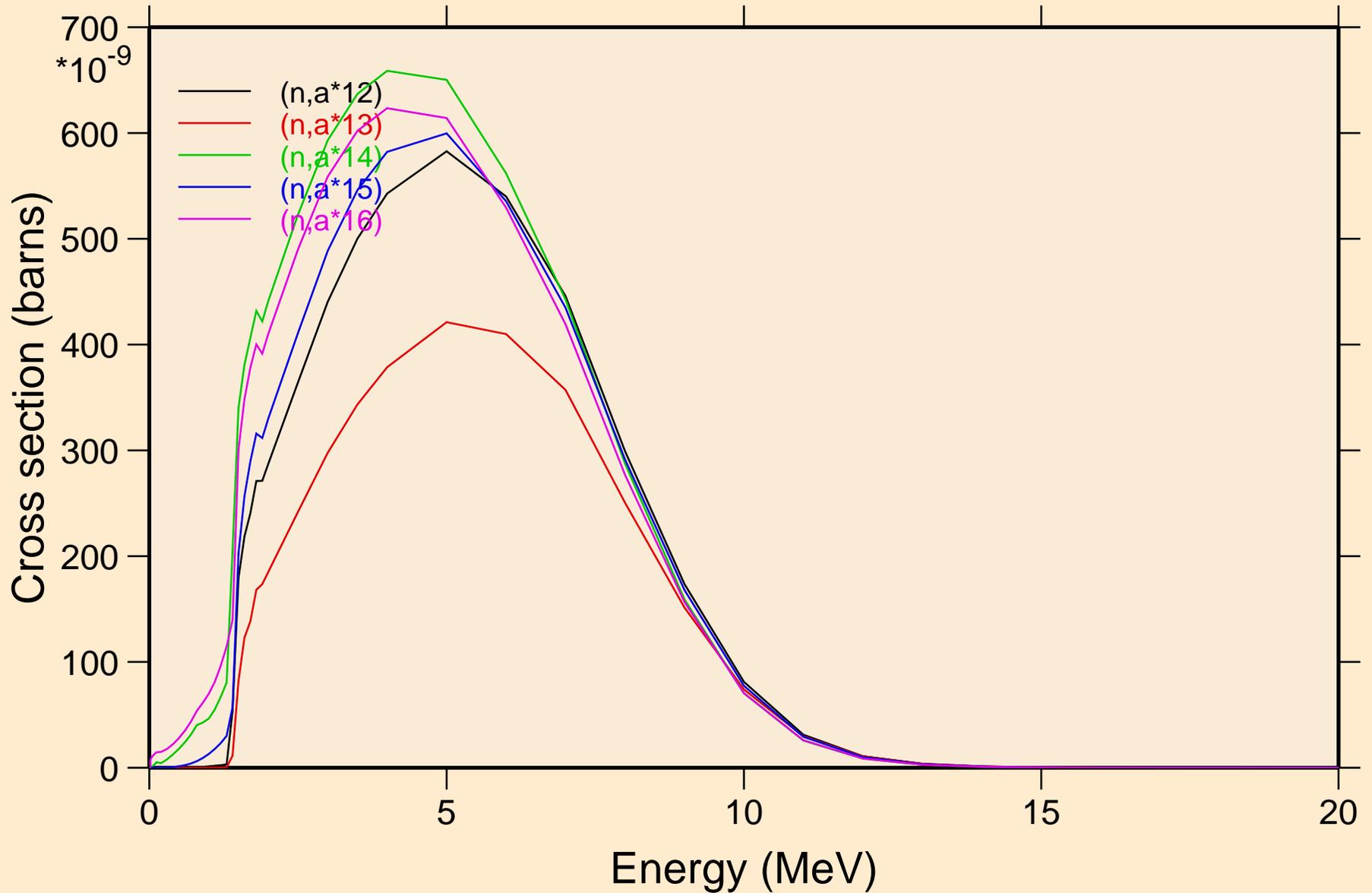
# ADVANCE CALCULATIONS

## Threshold reactions



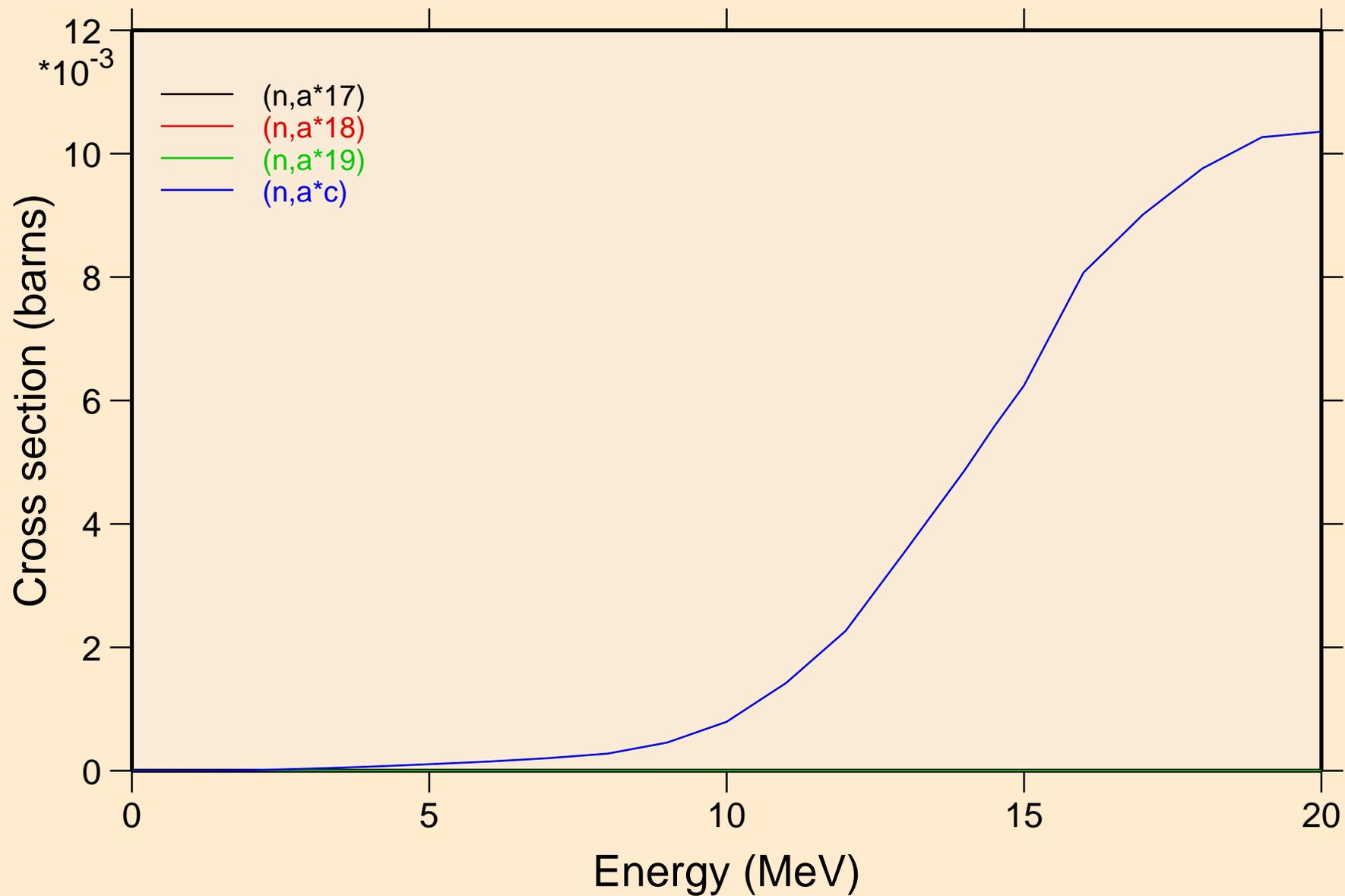
# ADVANCE CALCULATIONS

## Threshold reactions

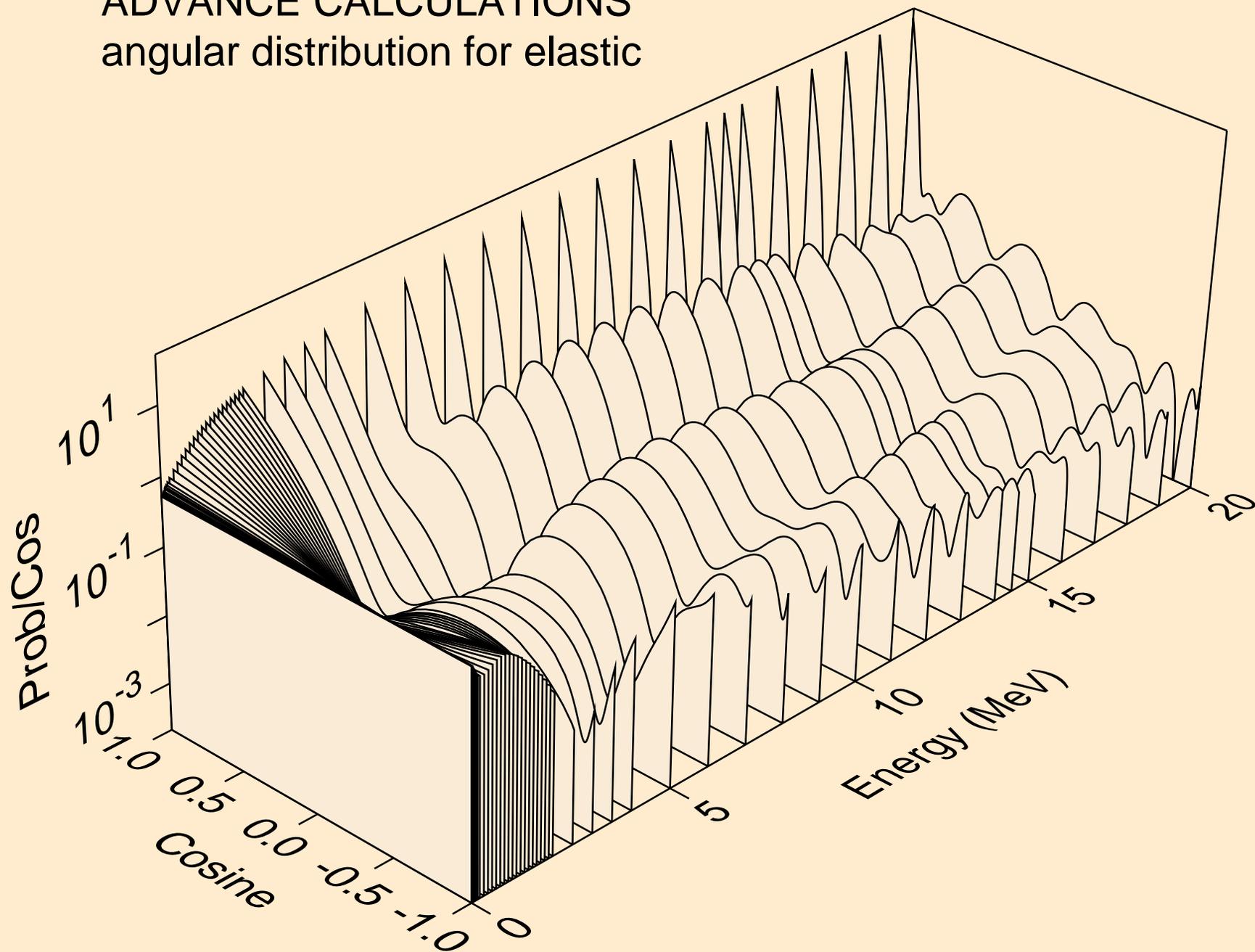


# ADVANCE CALCULATIONS

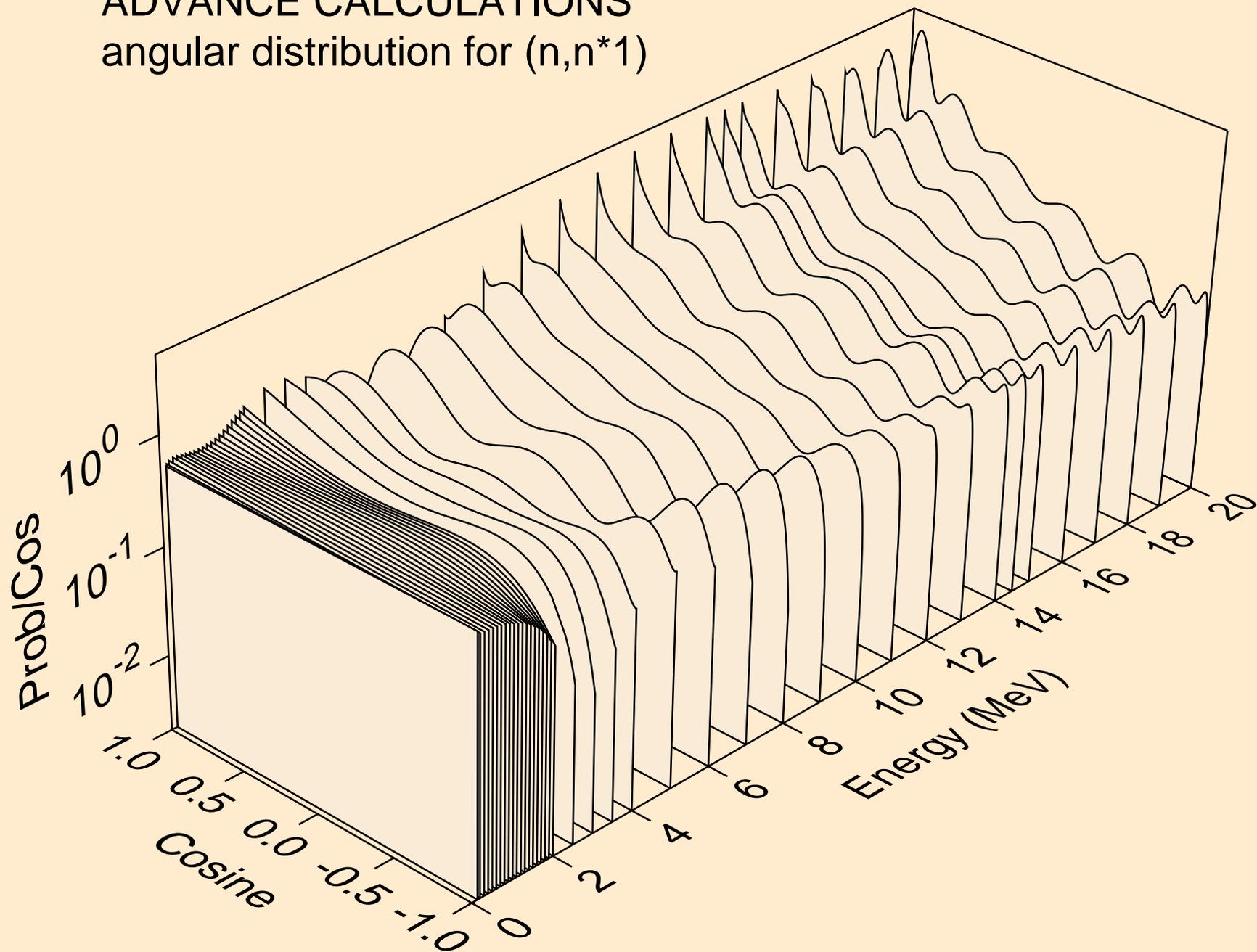
## Threshold reactions



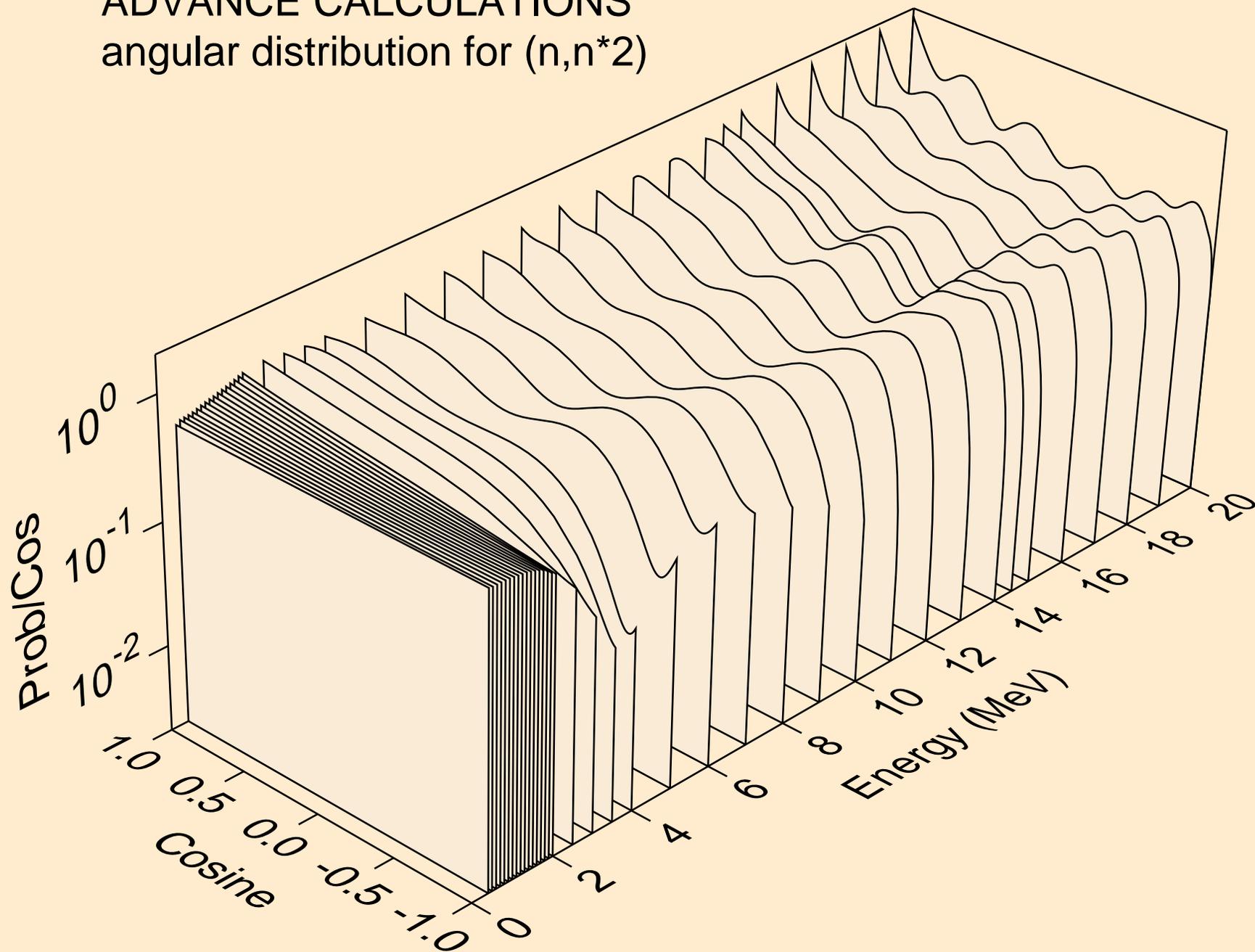
ADVANCE CALCULATIONS  
angular distribution for elastic



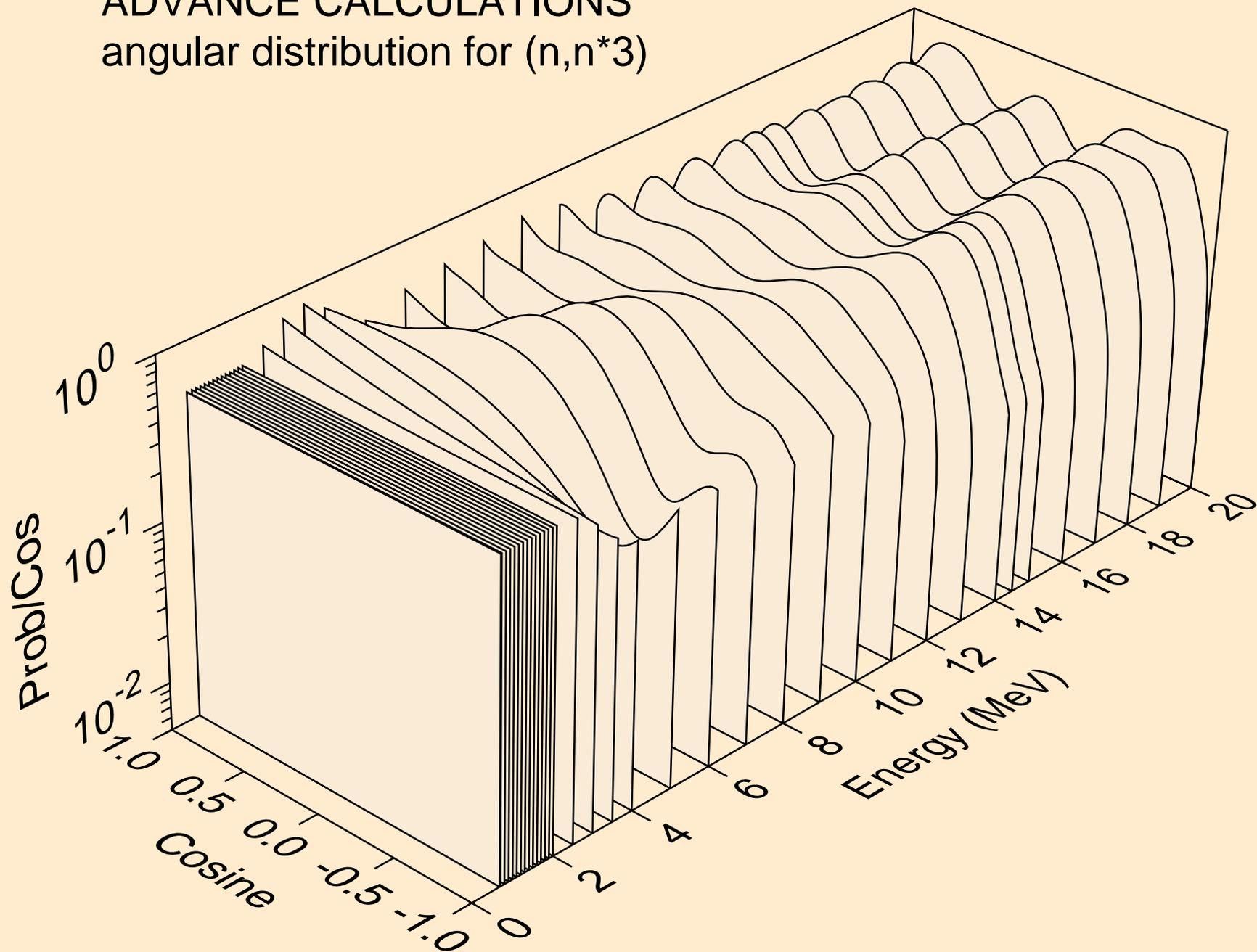
ADVANCE CALCULATIONS  
angular distribution for (n,n\*1)



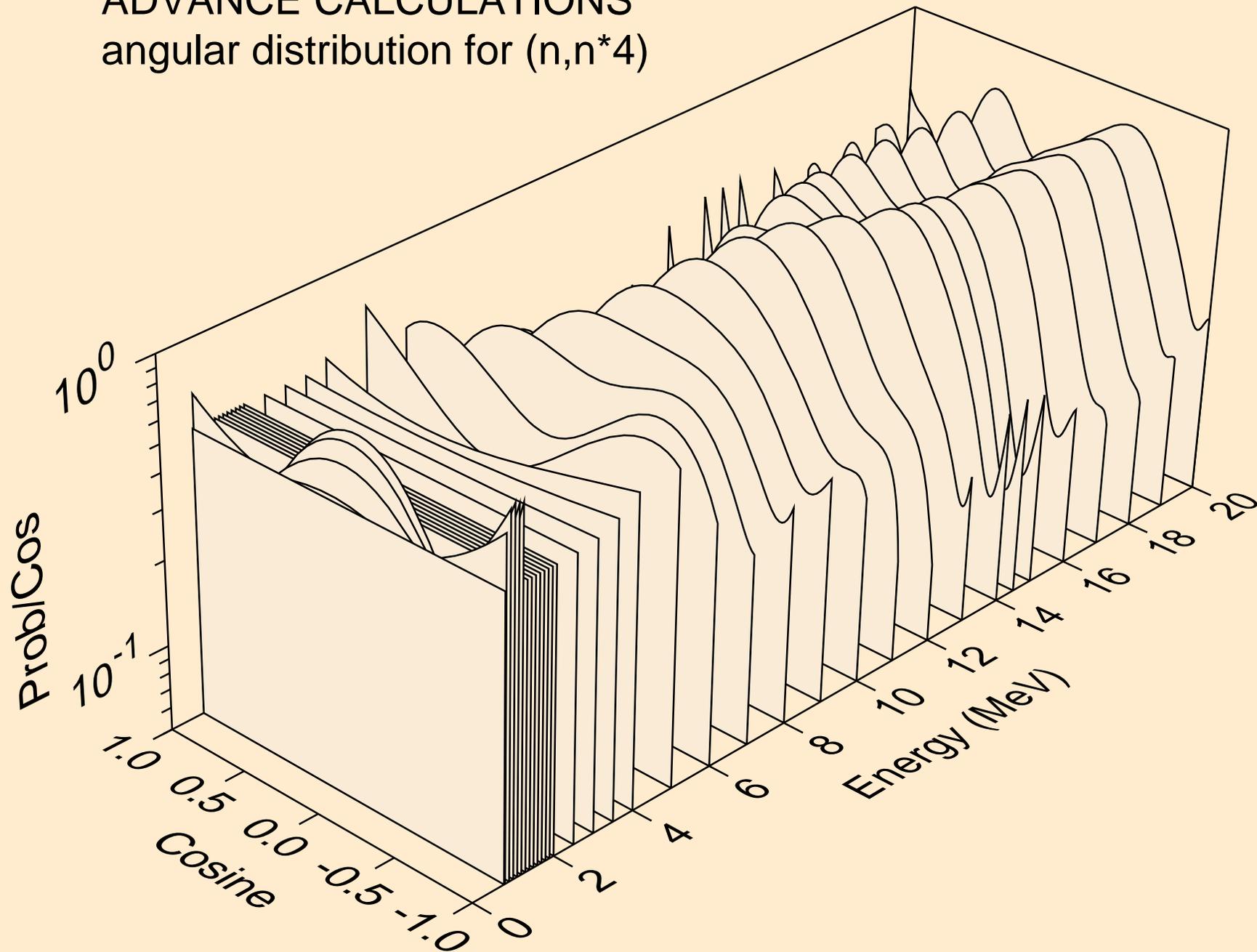
ADVANCE CALCULATIONS  
angular distribution for (n,n\*2)



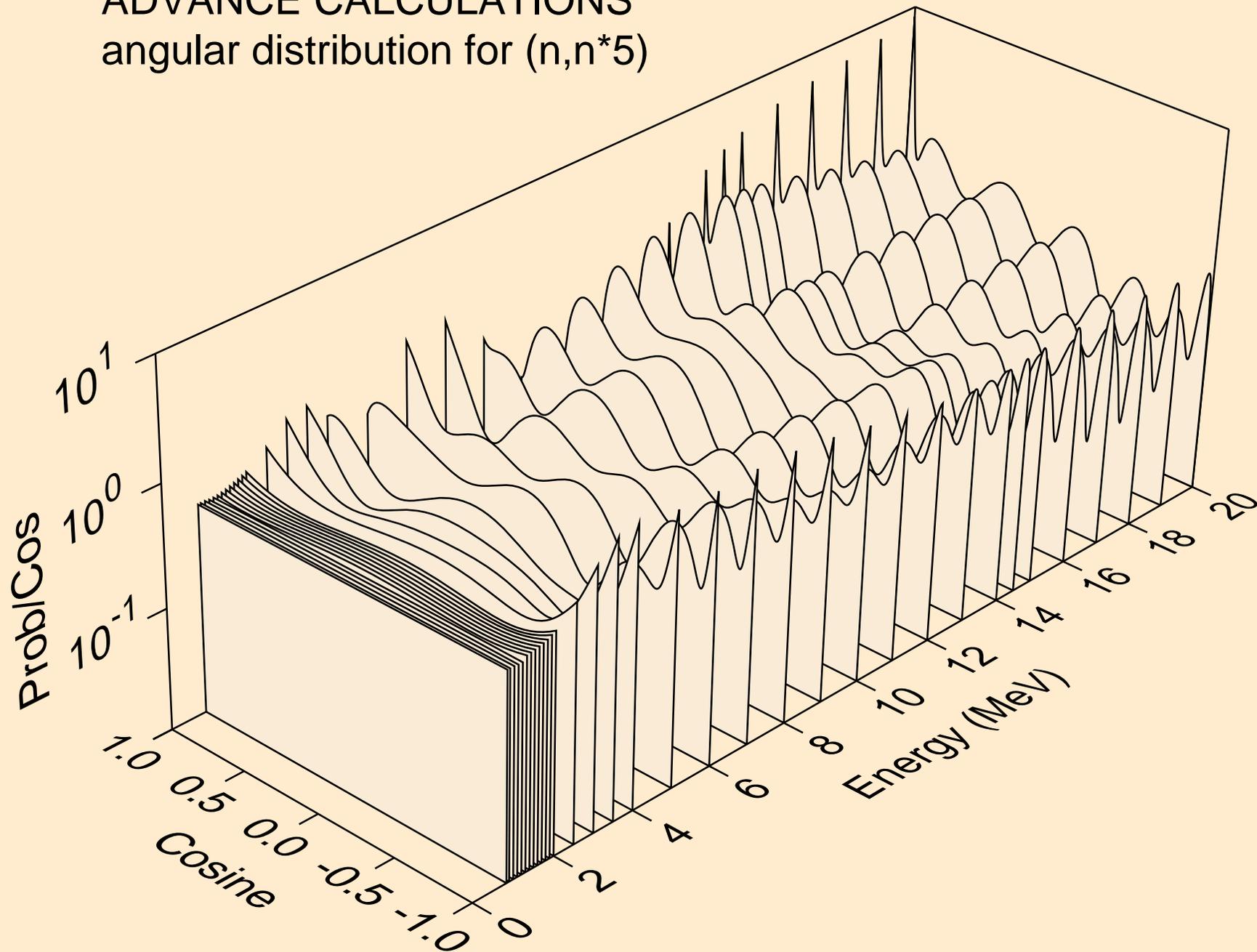
ADVANCE CALCULATIONS  
angular distribution for (n,n\*3)



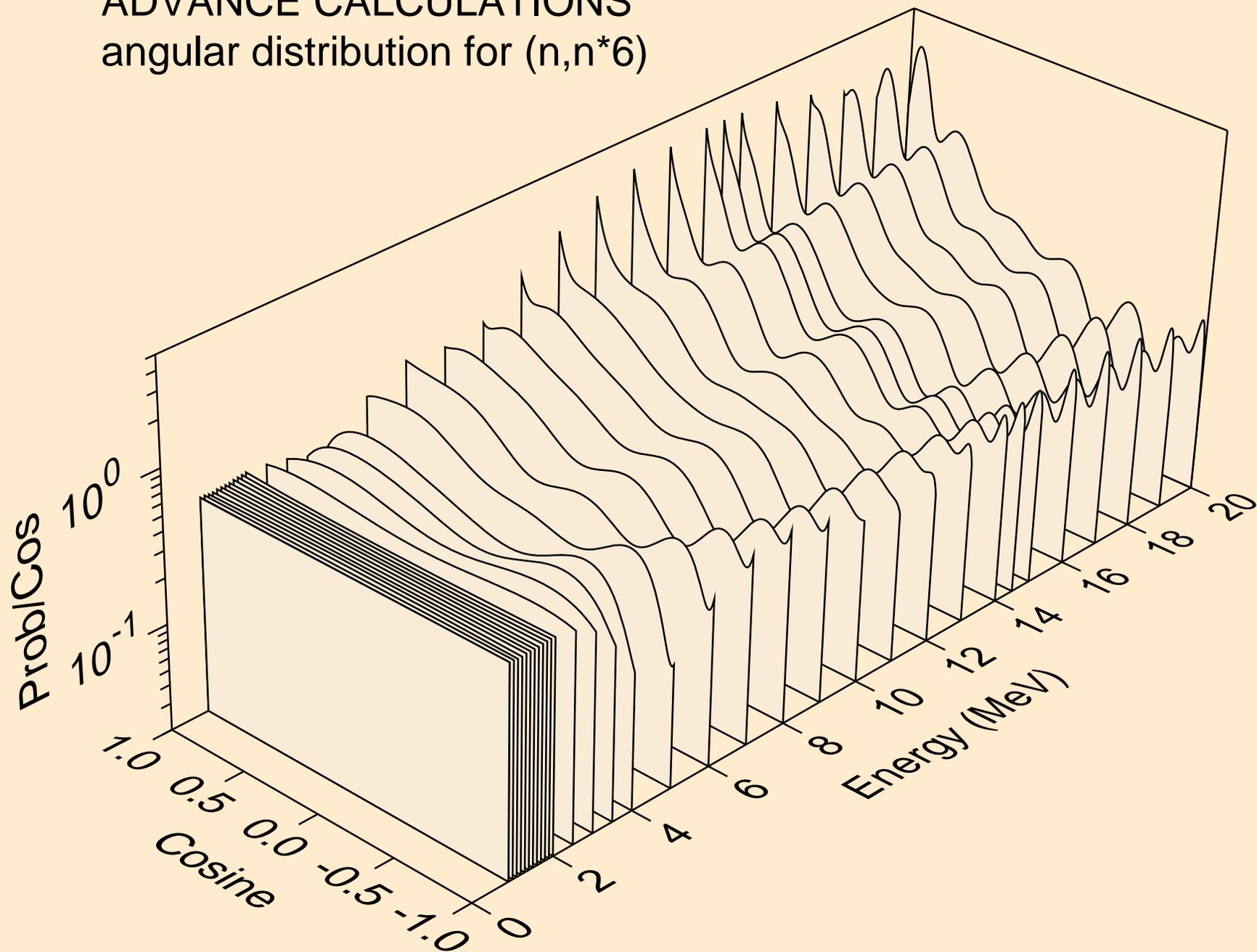
ADVANCE CALCULATIONS  
angular distribution for (n,n\*4)



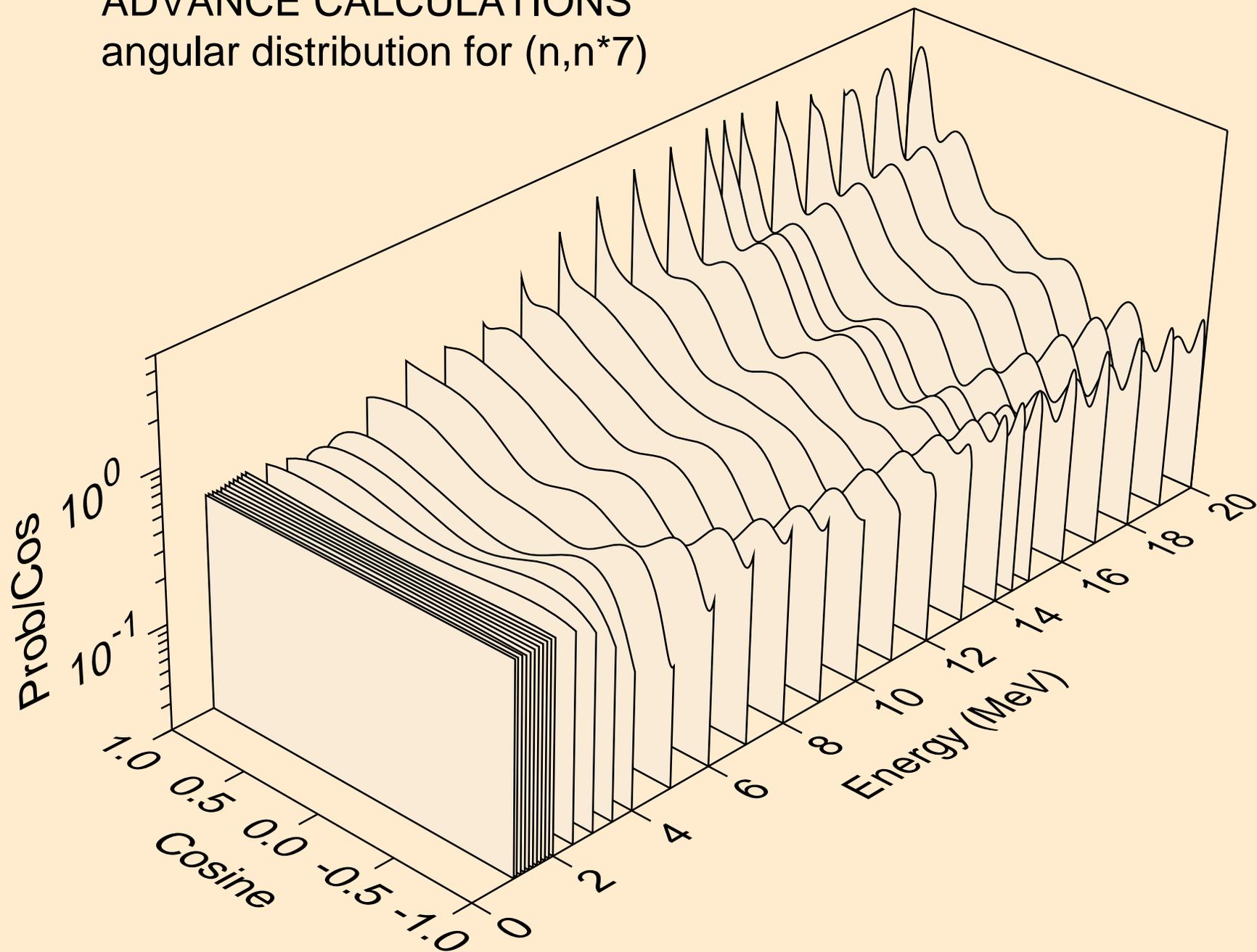
ADVANCE CALCULATIONS  
angular distribution for (n,n\*5)



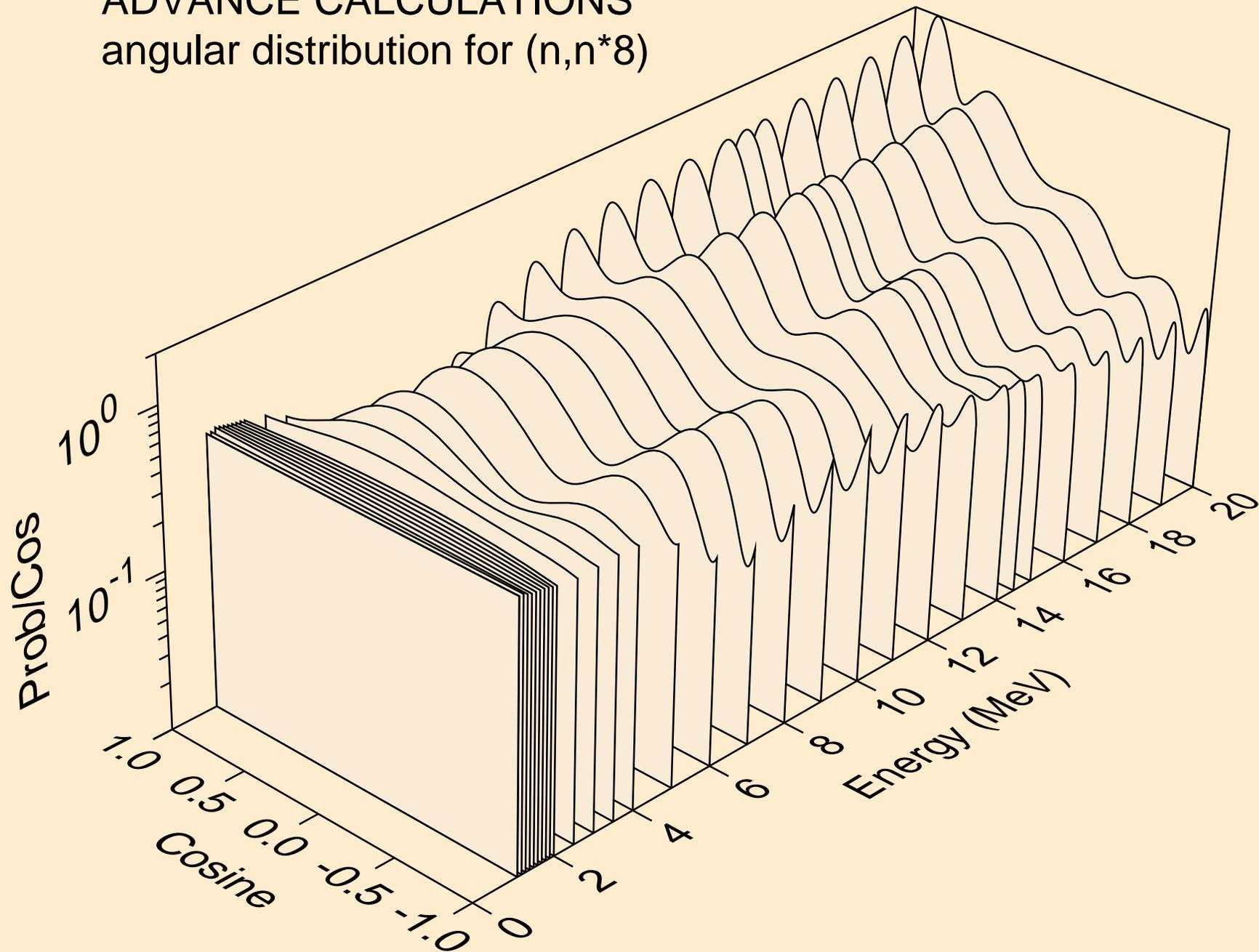
ADVANCE CALCULATIONS  
angular distribution for (n,n\*6)



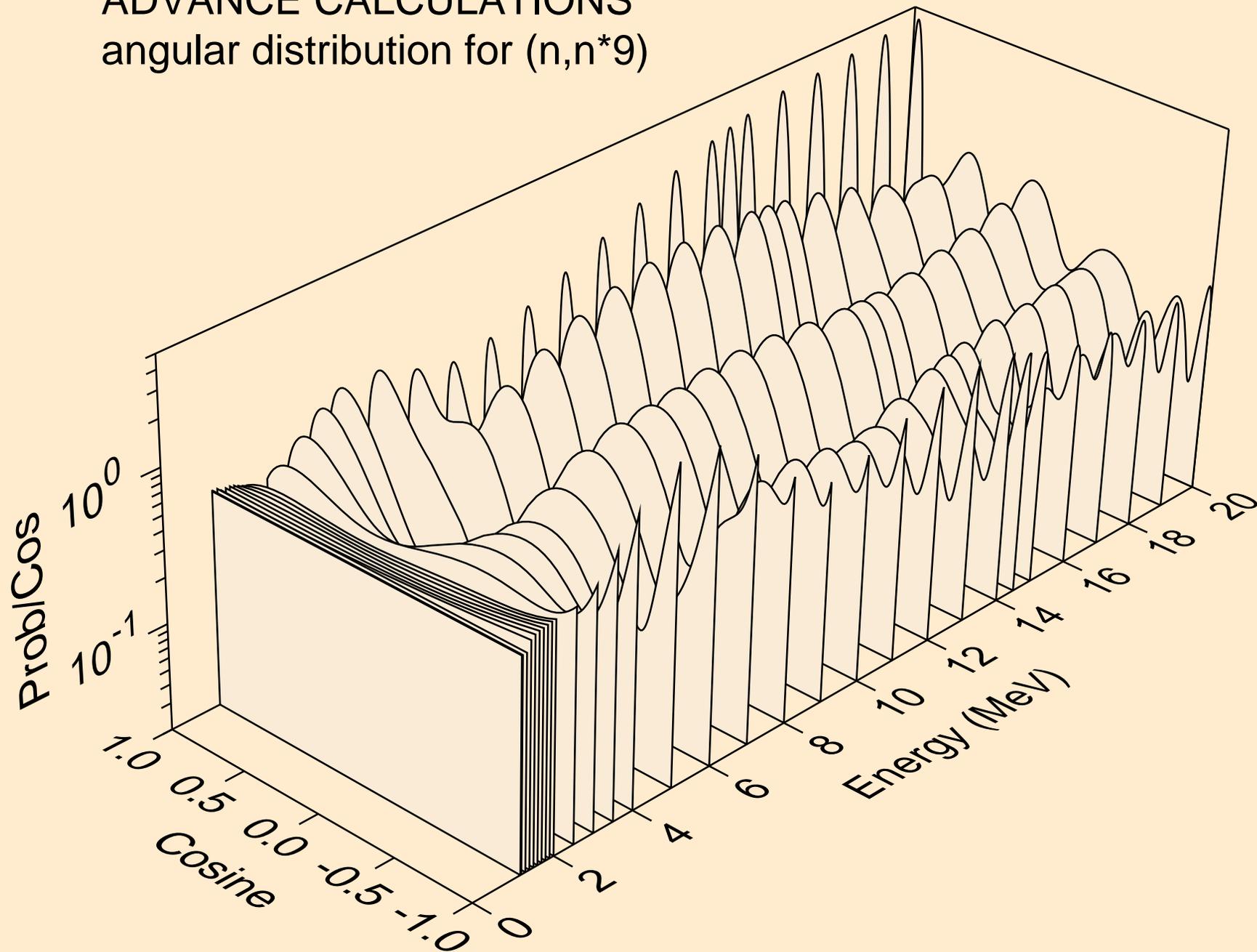
ADVANCE CALCULATIONS  
angular distribution for (n,n\*7)



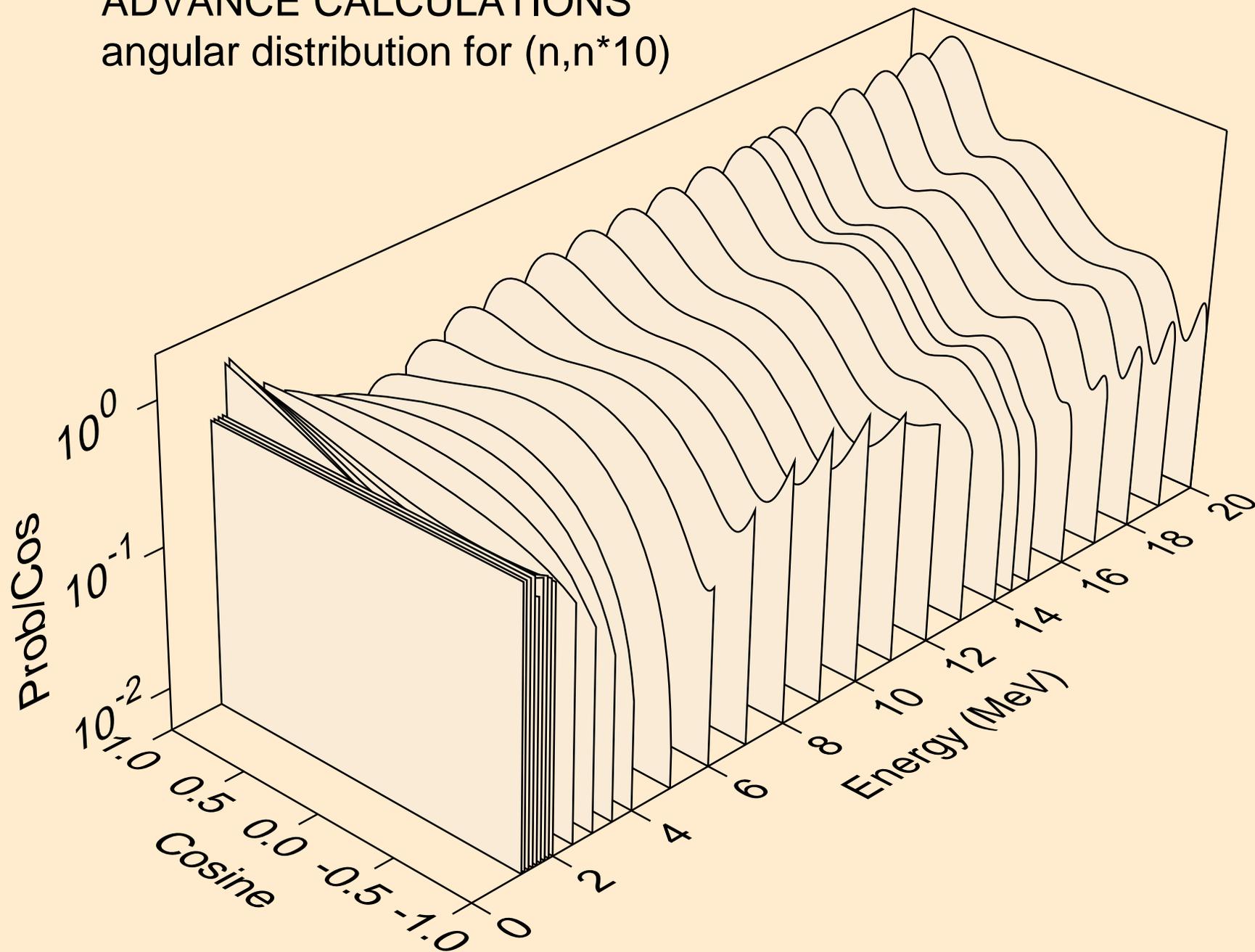
ADVANCE CALCULATIONS  
angular distribution for (n,n\*8)



ADVANCE CALCULATIONS  
angular distribution for (n,n\*9)

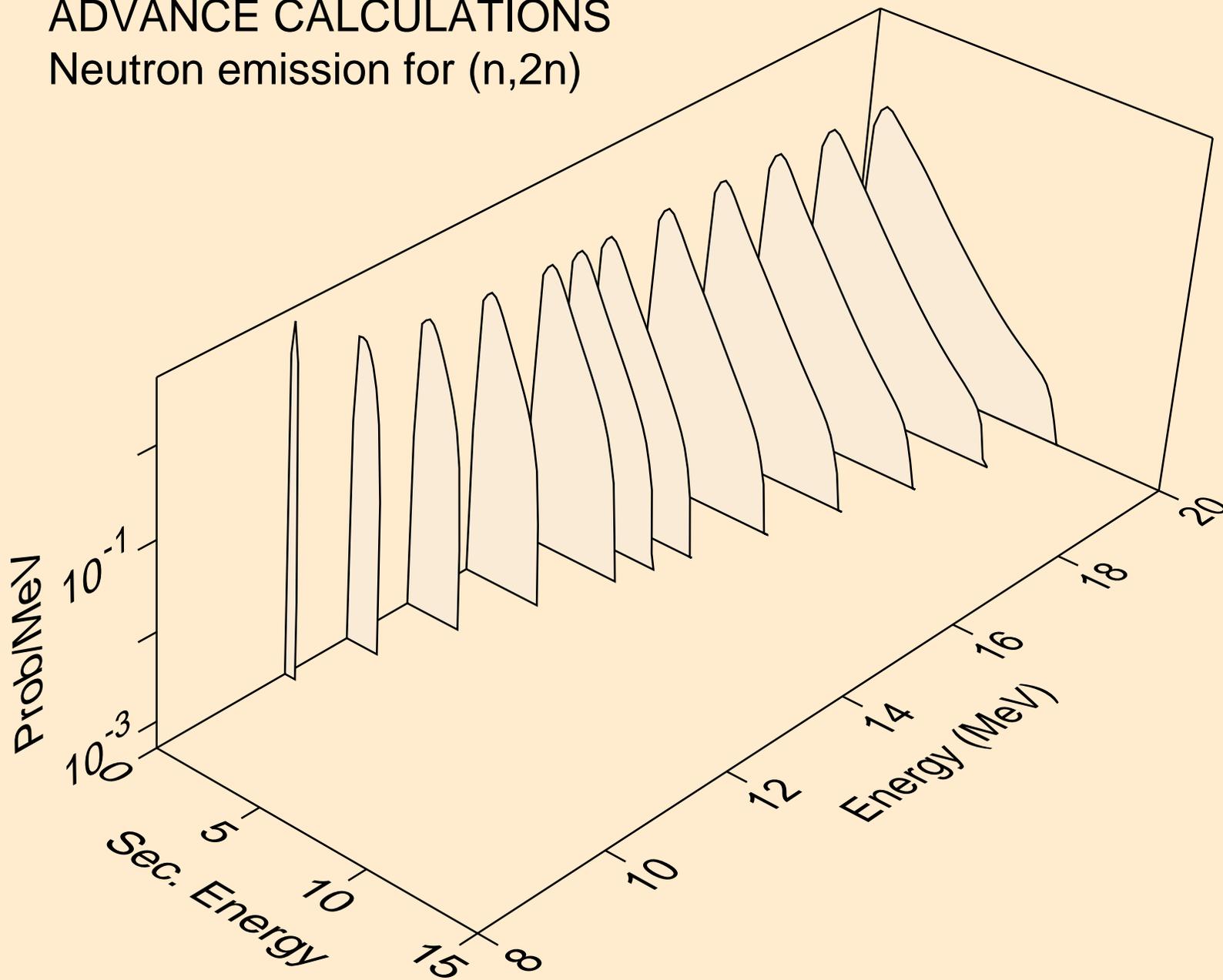


ADVANCE CALCULATIONS  
angular distribution for (n,n\*10)



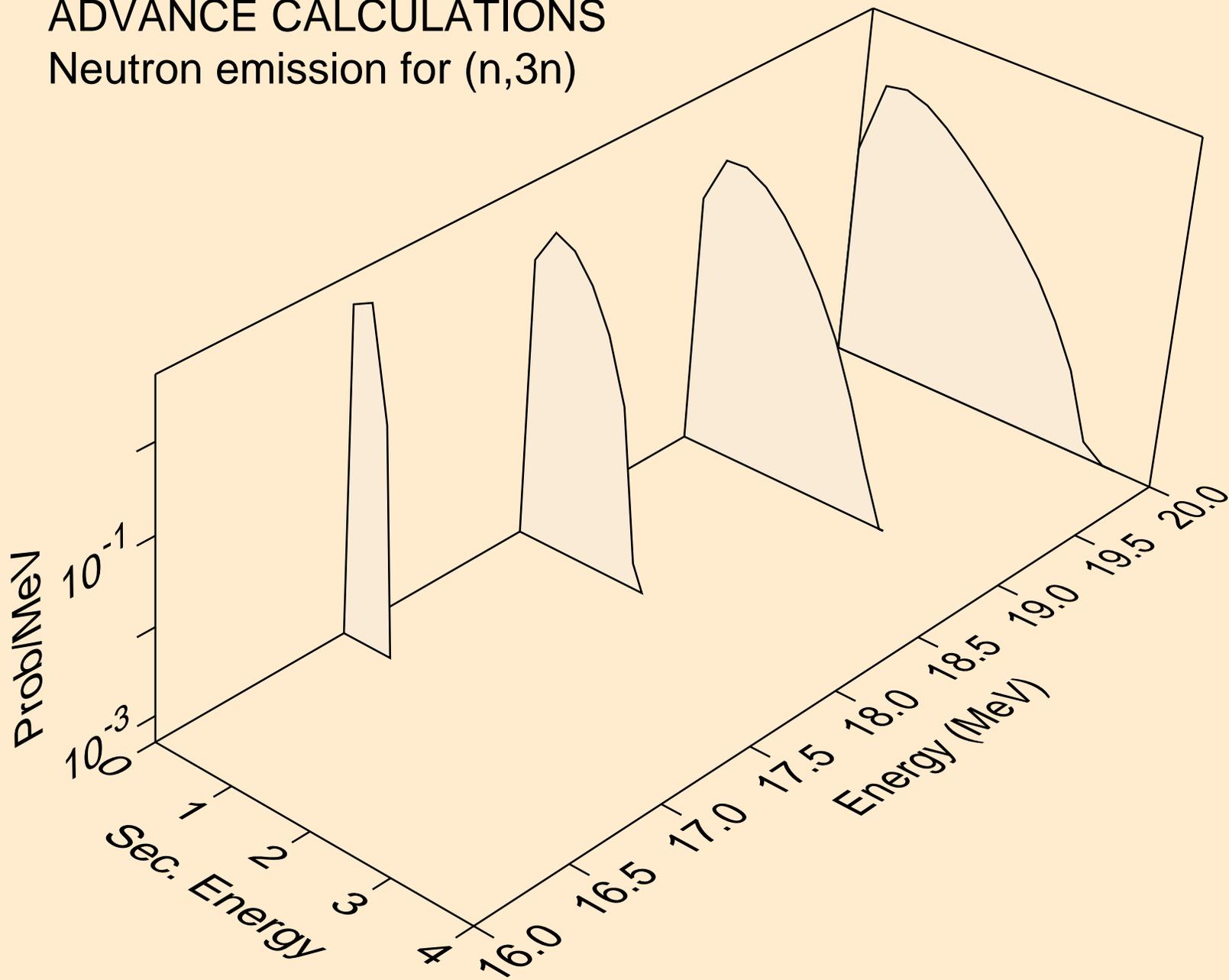
# ADVANCE CALCULATIONS

## Neutron emission for (n,2n)



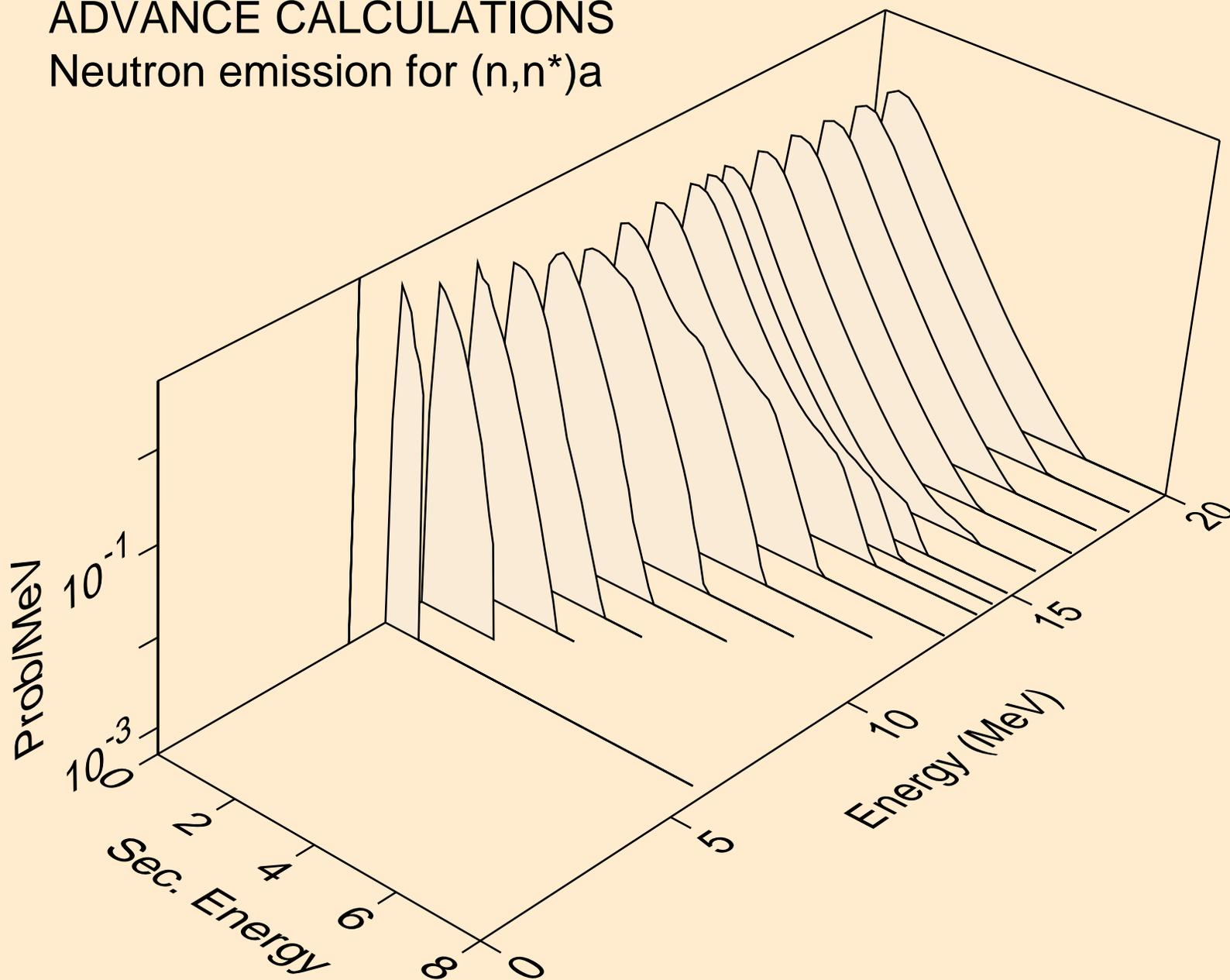
# ADVANCE CALCULATIONS

## Neutron emission for (n,3n)



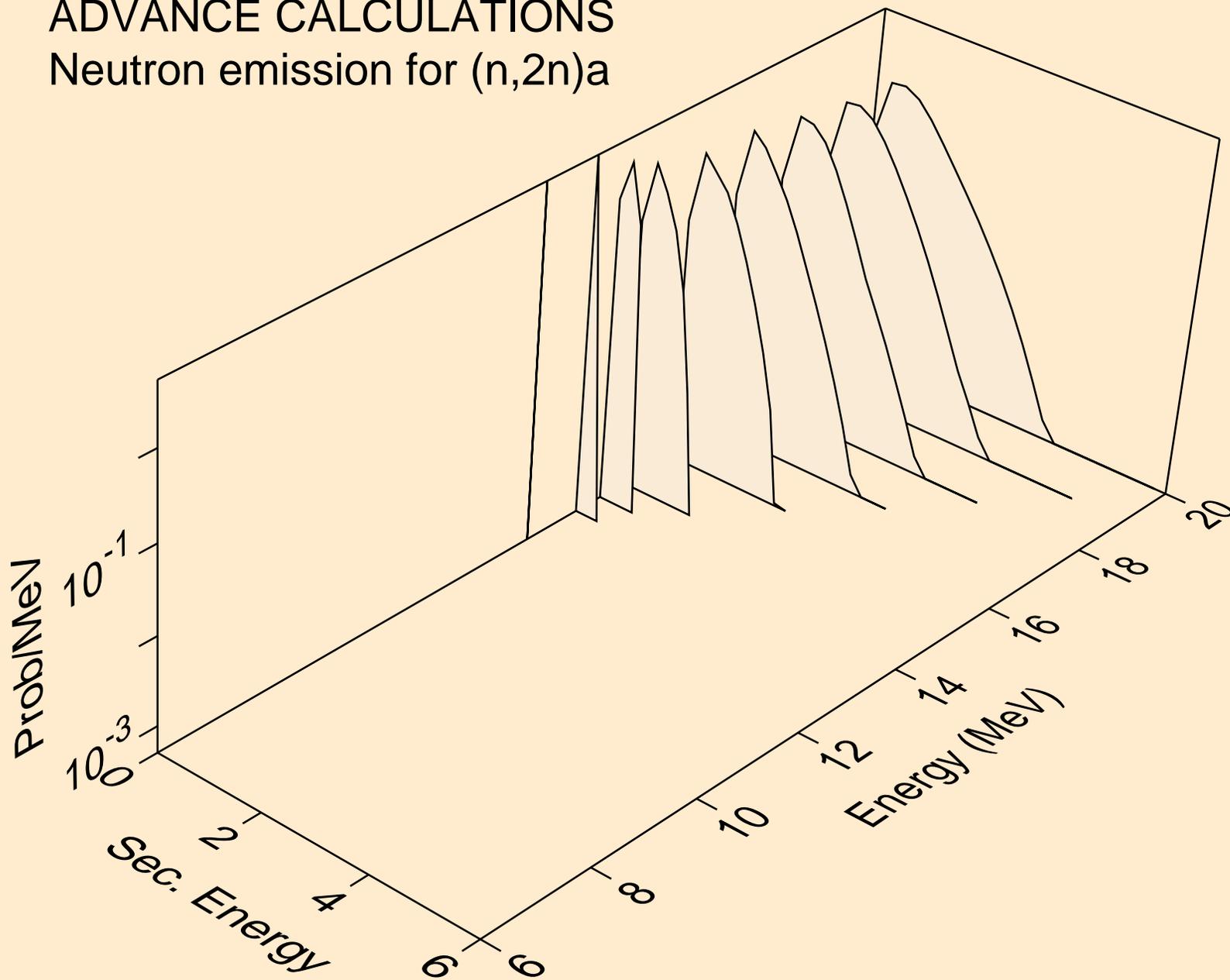
# ADVANCE CALCULATIONS

## Neutron emission for $(n,n^*)a$



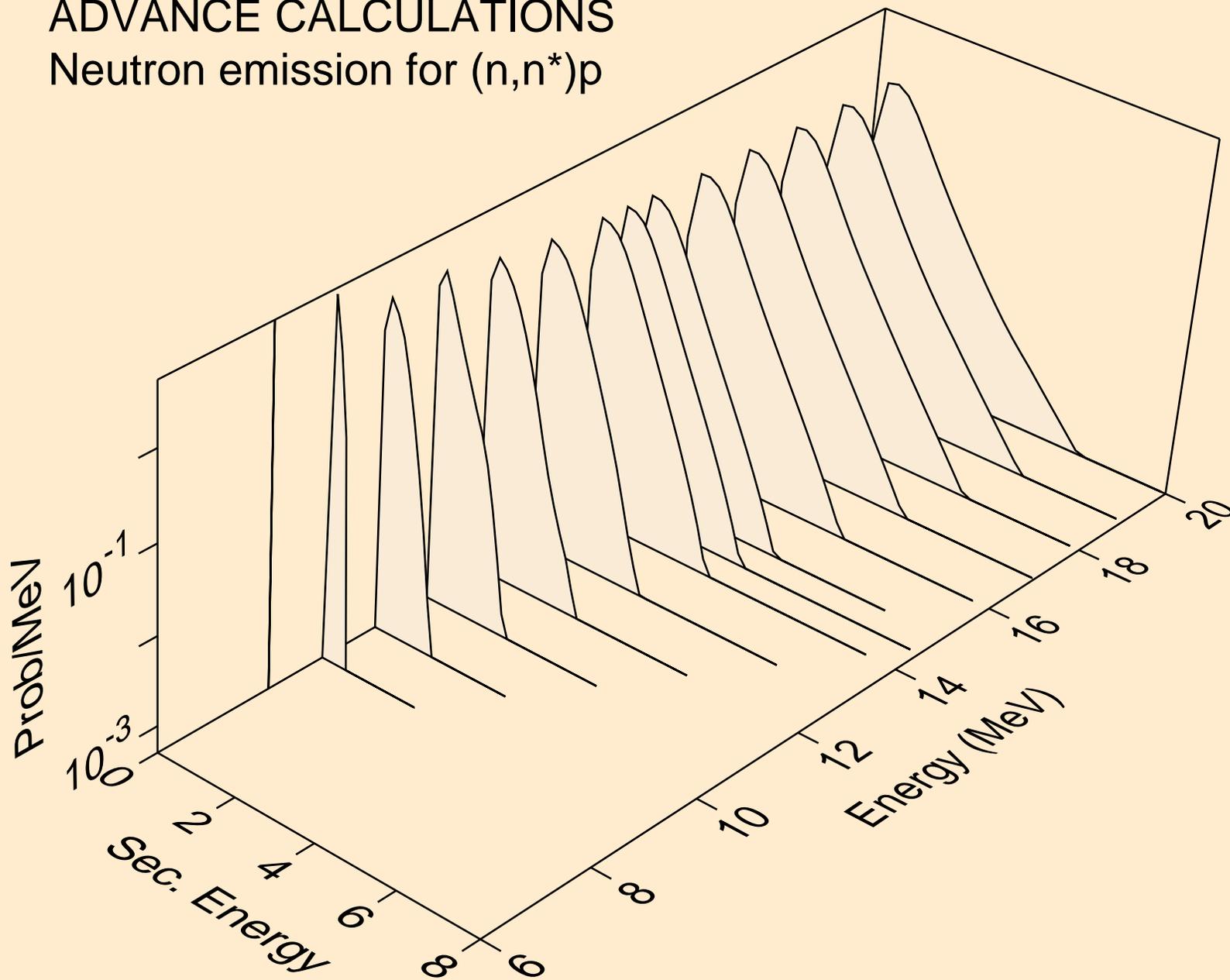
# ADVANCE CALCULATIONS

## Neutron emission for (n,2n)<sub>a</sub>



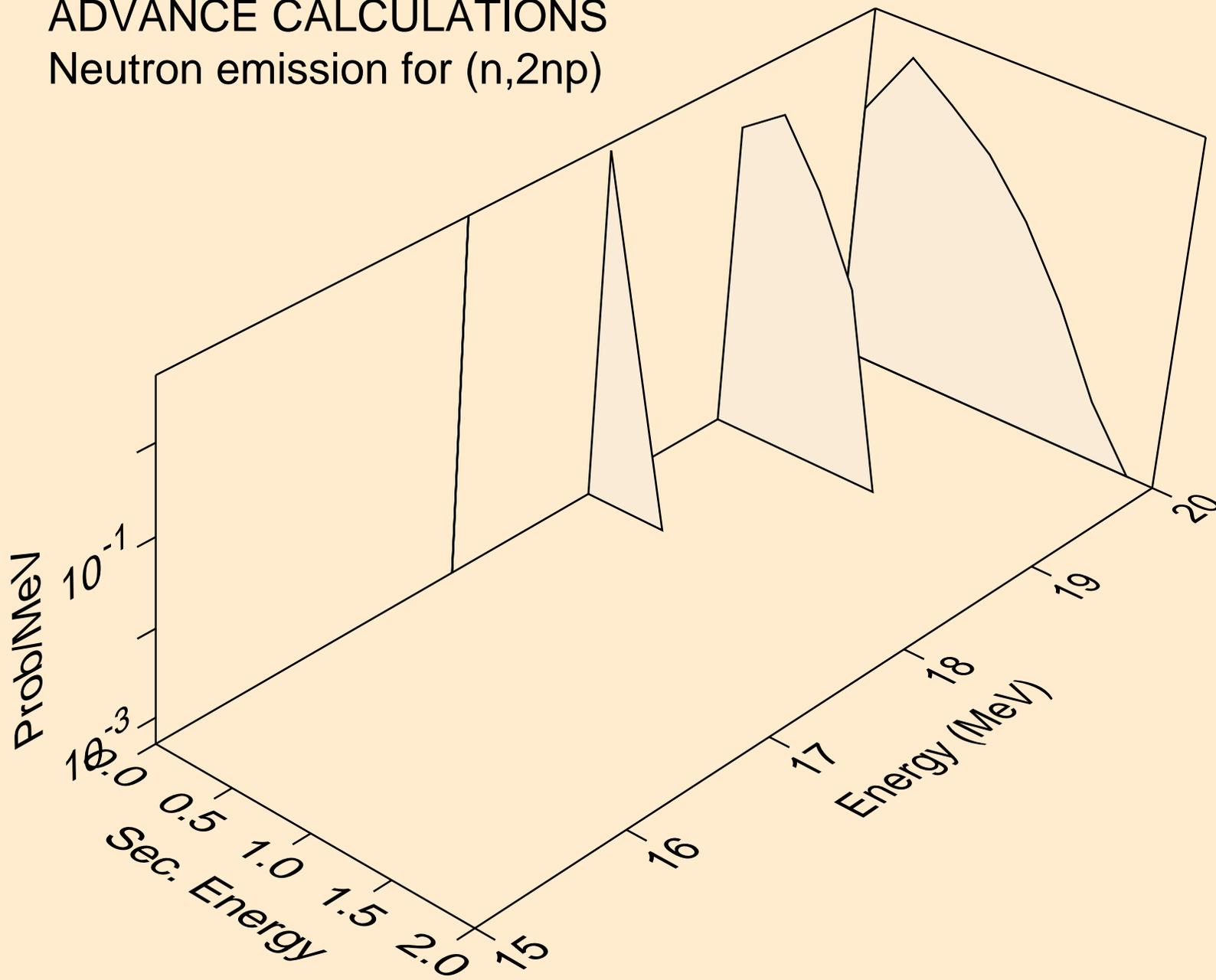
# ADVANCE CALCULATIONS

## Neutron emission for $(n,n^*)p$



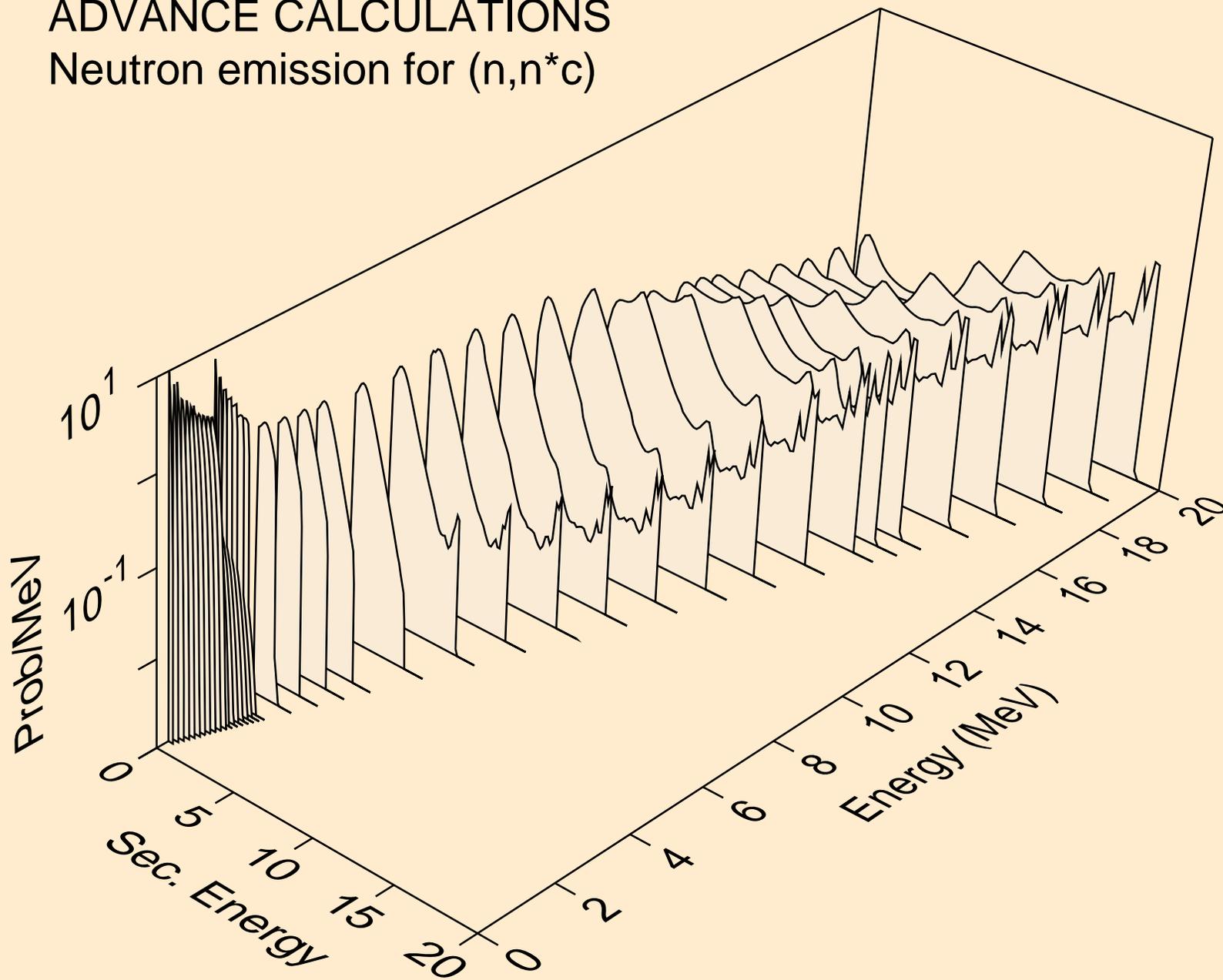
# ADVANCE CALCULATIONS

## Neutron emission for (n,2np)



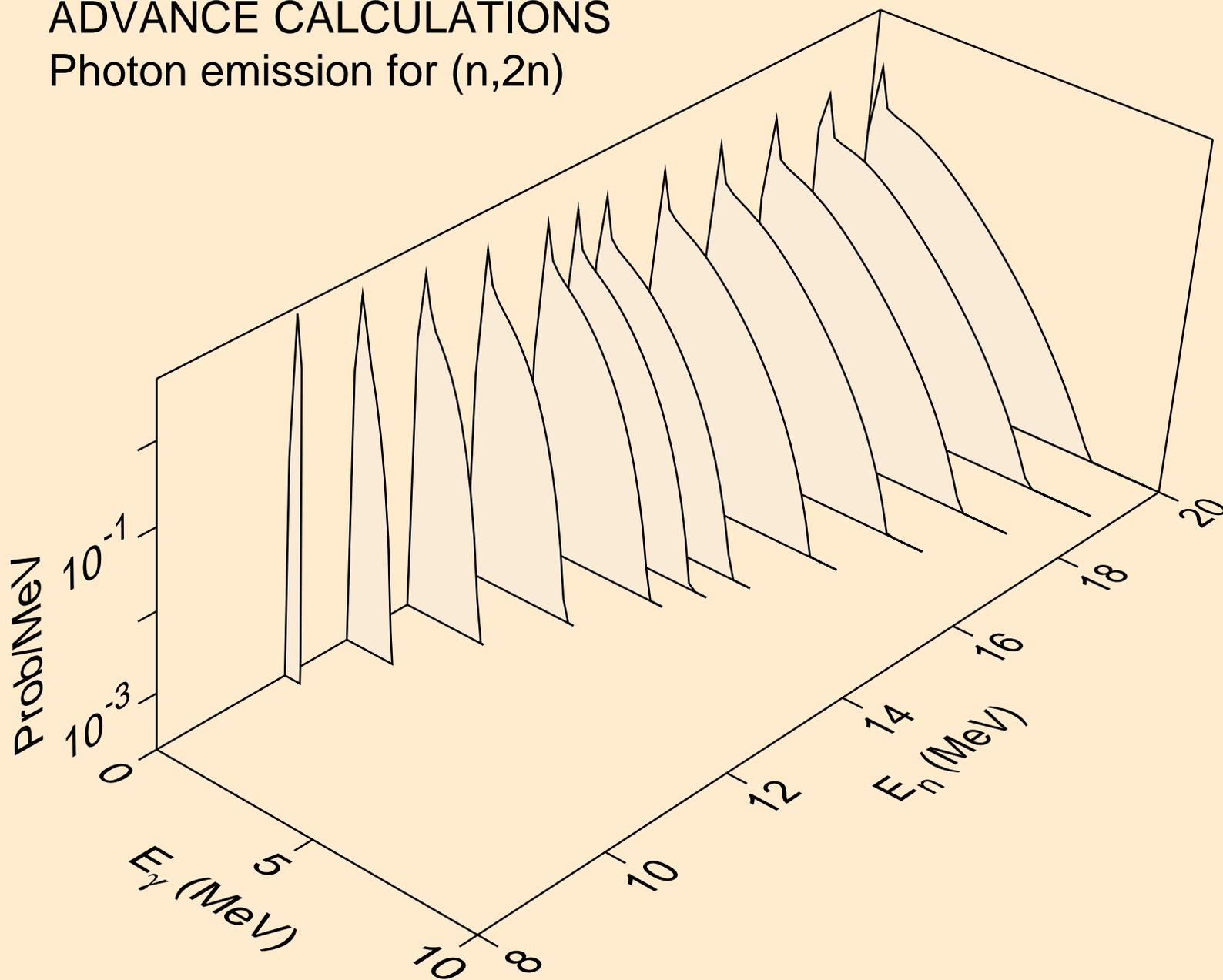
# ADVANCE CALCULATIONS

## Neutron emission for (n,n\*c)



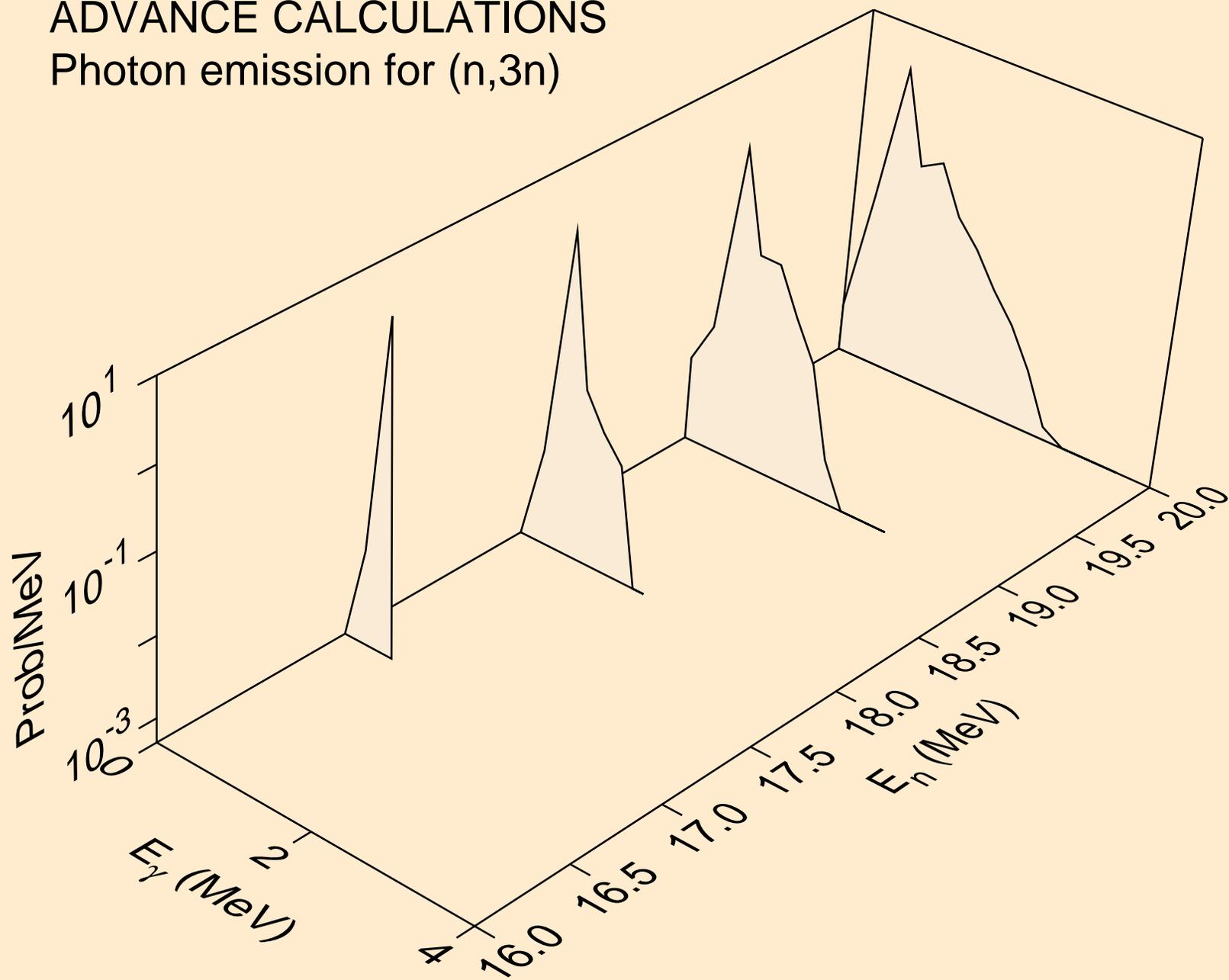
# ADVANCE CALCULATIONS

Photon emission for (n,2n)



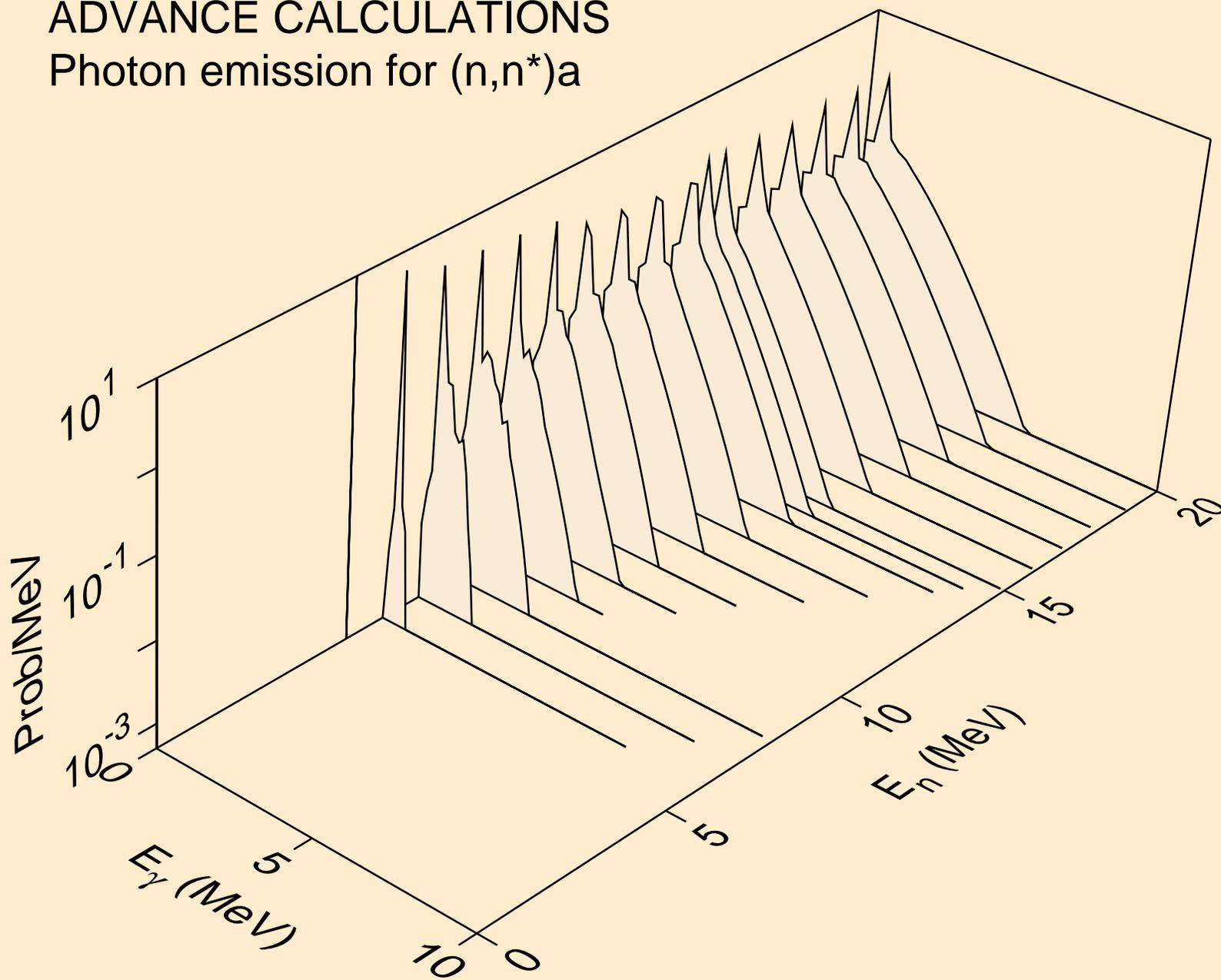
# ADVANCE CALCULATIONS

Photon emission for (n,3n)



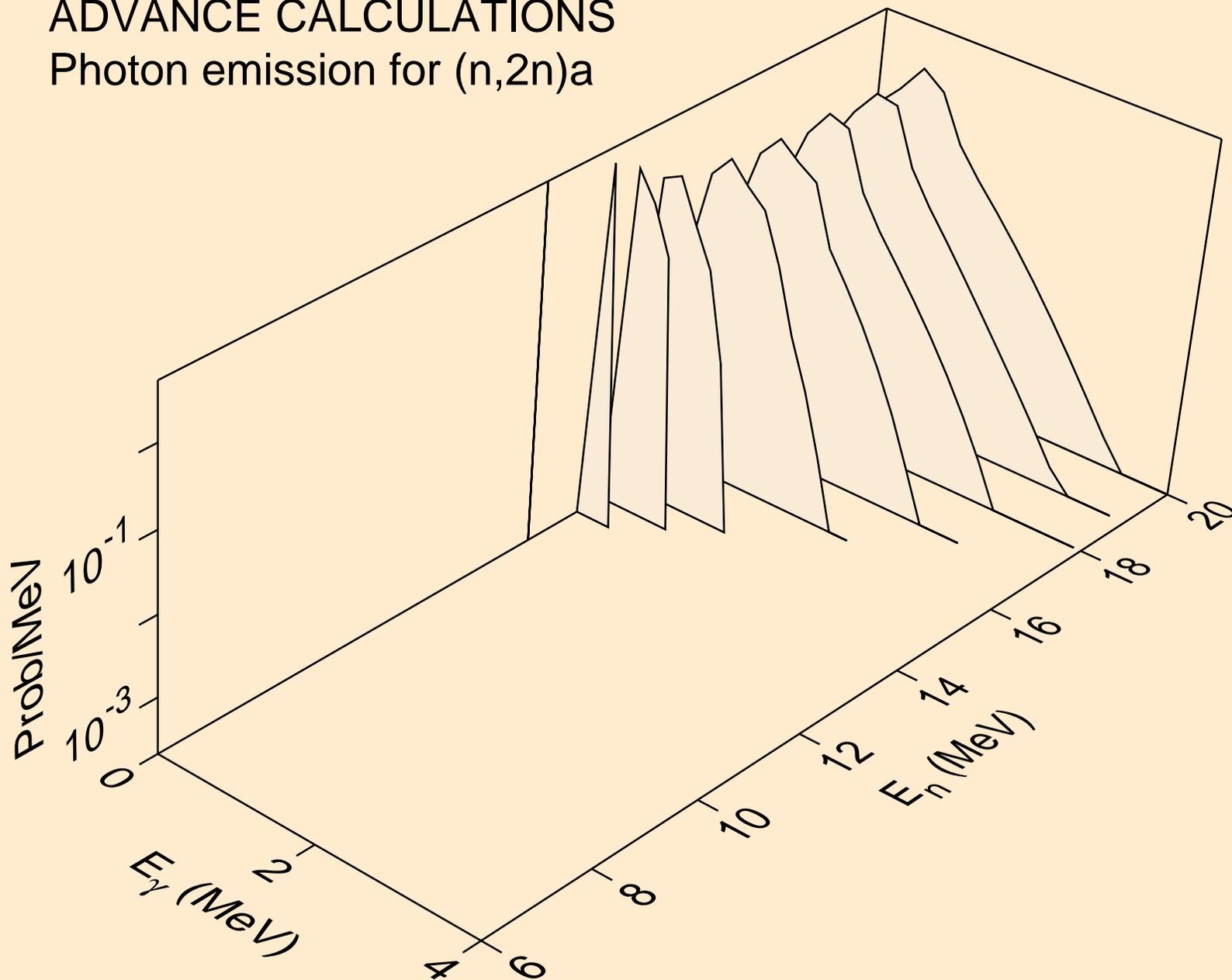
# ADVANCE CALCULATIONS

Photon emission for  $(n,n^*)_a$



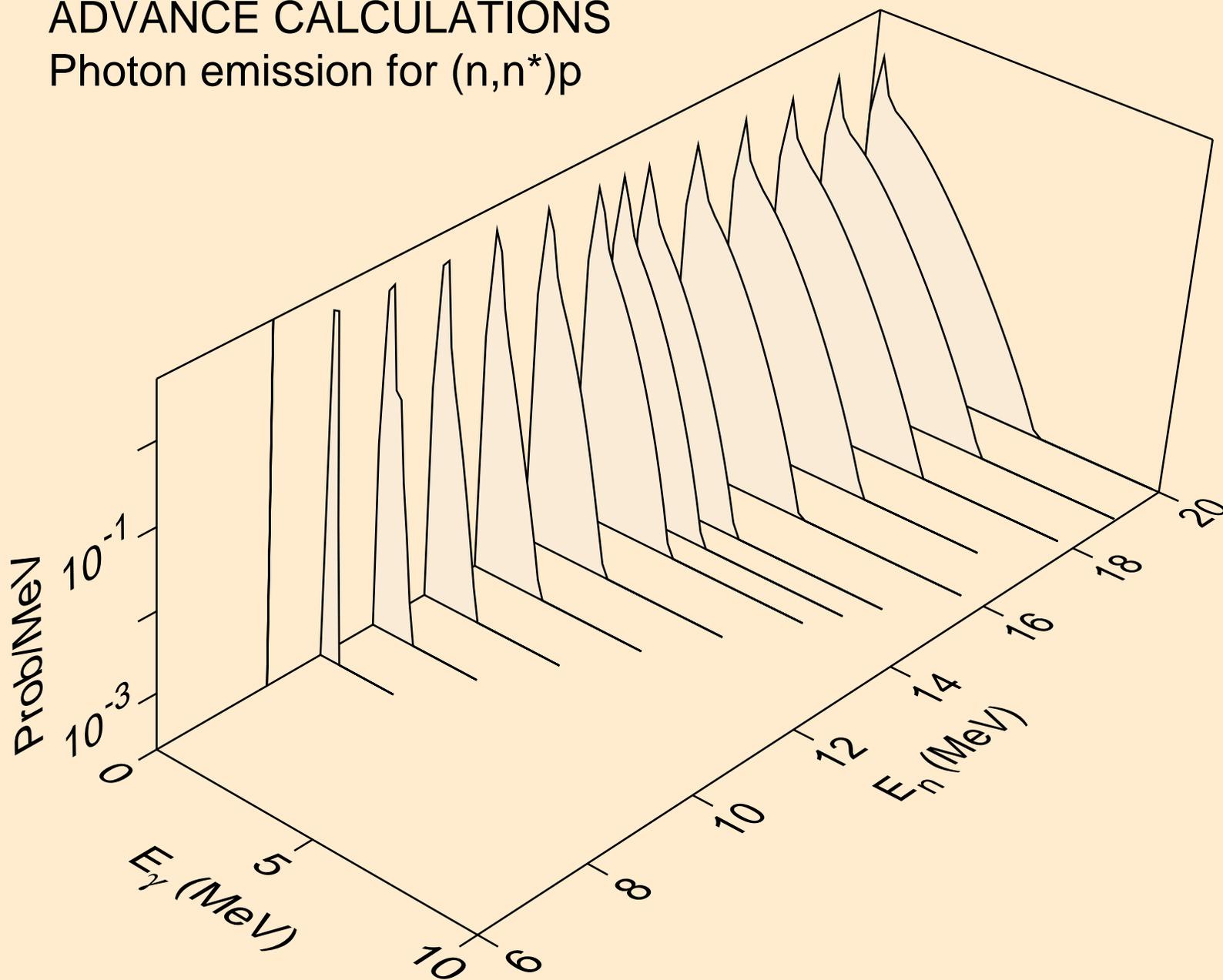
# ADVANCE CALCULATIONS

## Photon emission for (n,2n) $\alpha$



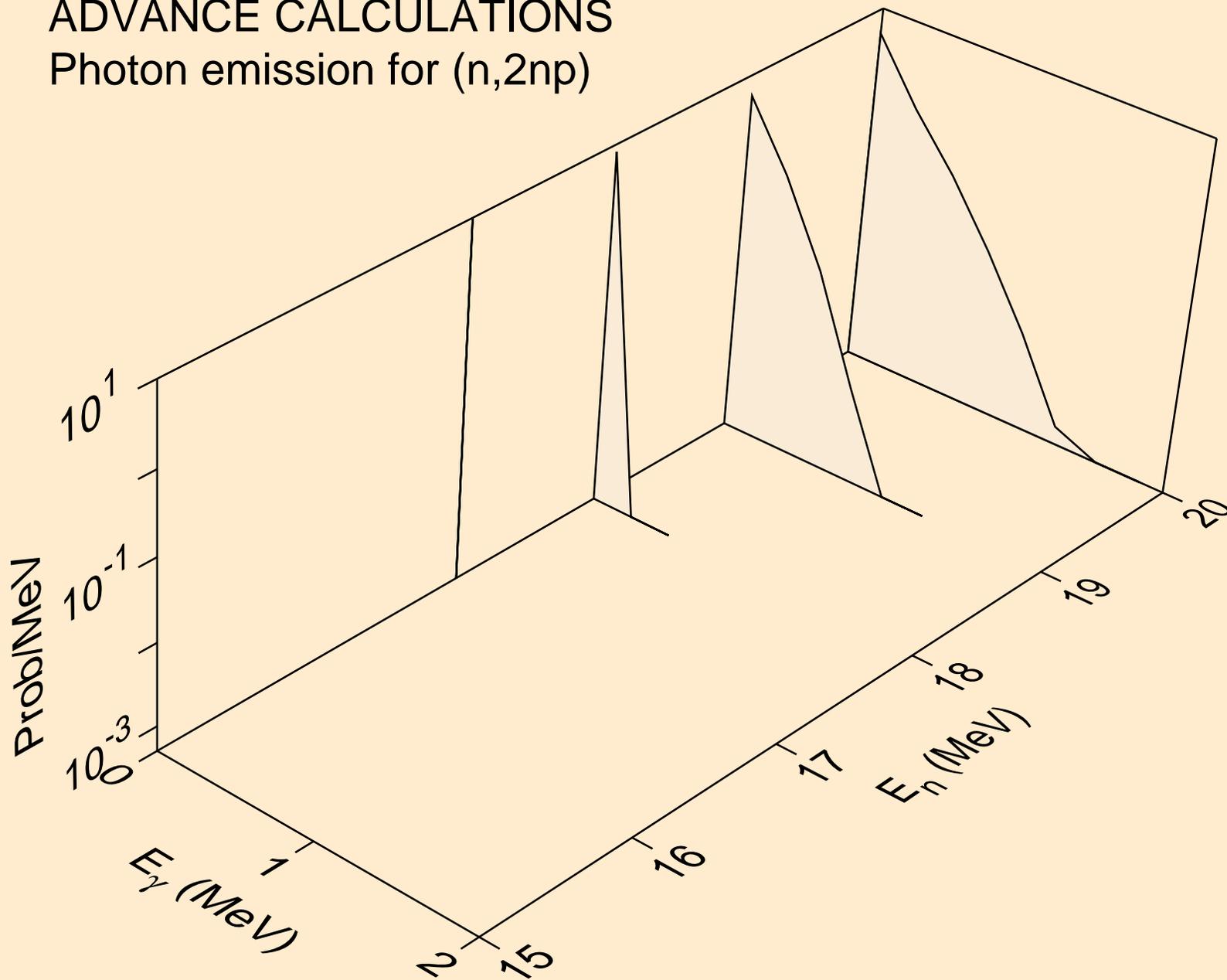
# ADVANCE CALCULATIONS

Photon emission for  $(n,n^*)p$



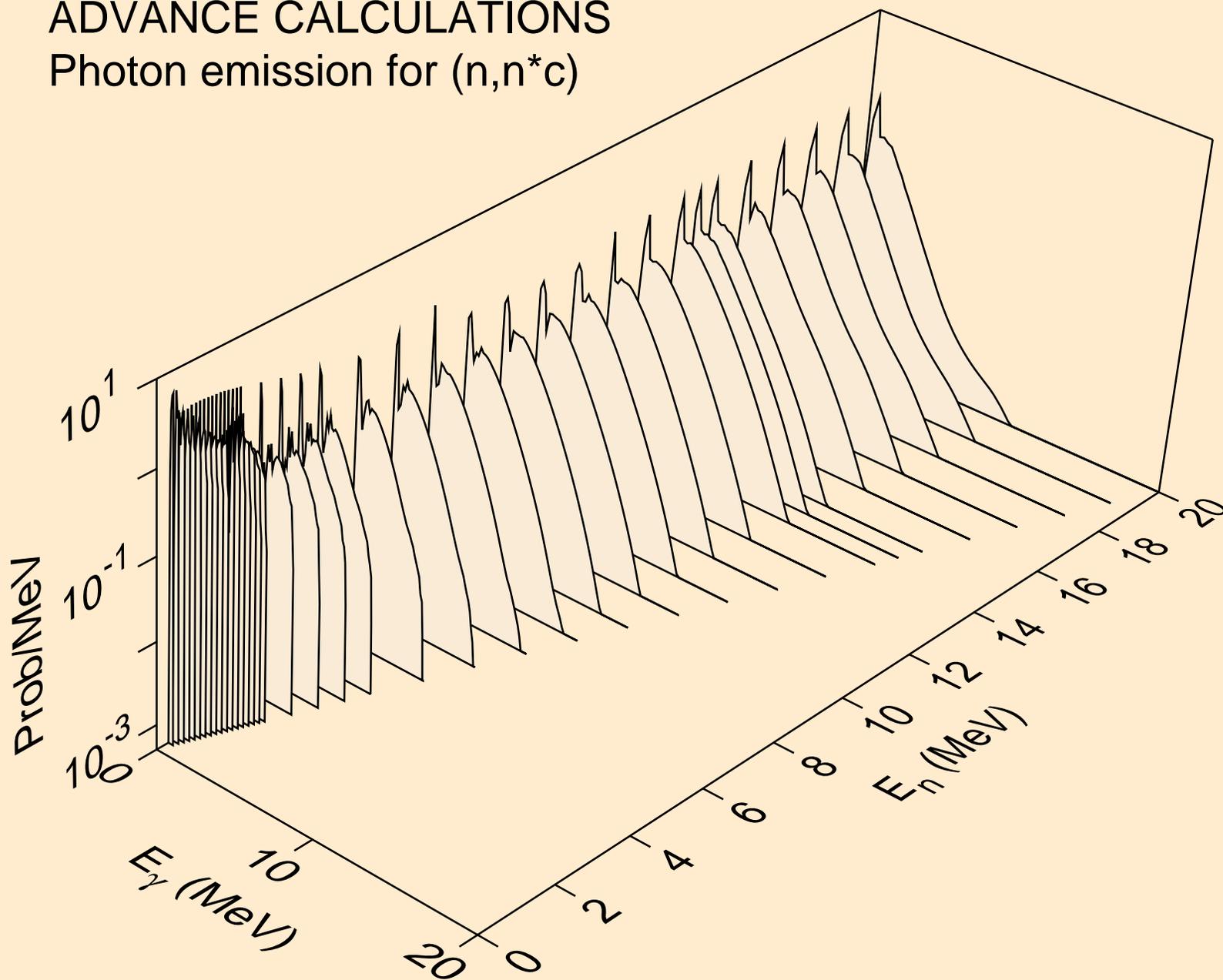
# ADVANCE CALCULATIONS

Photon emission for (n,2np)



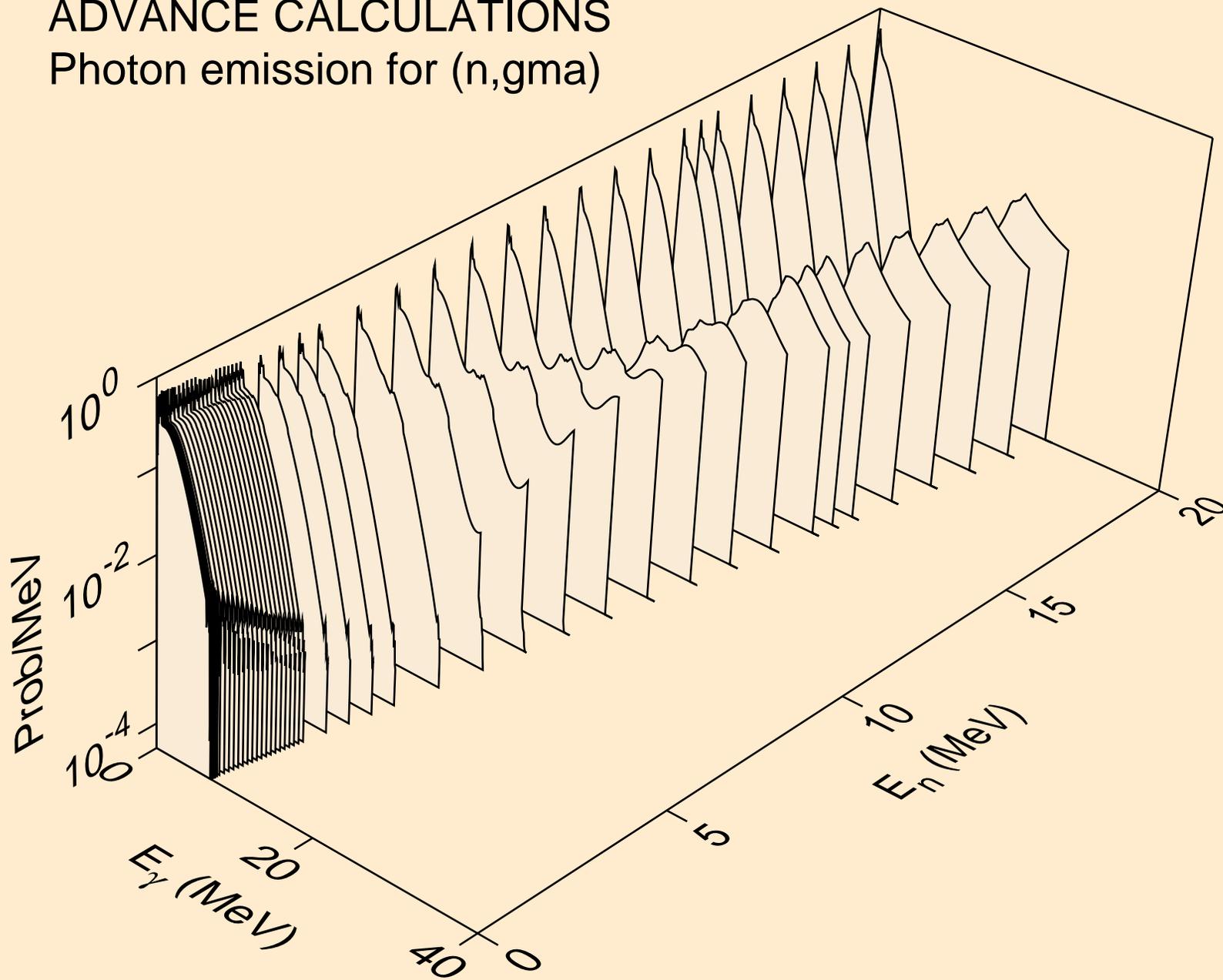
# ADVANCE CALCULATIONS

## Photon emission for (n,n\*c)



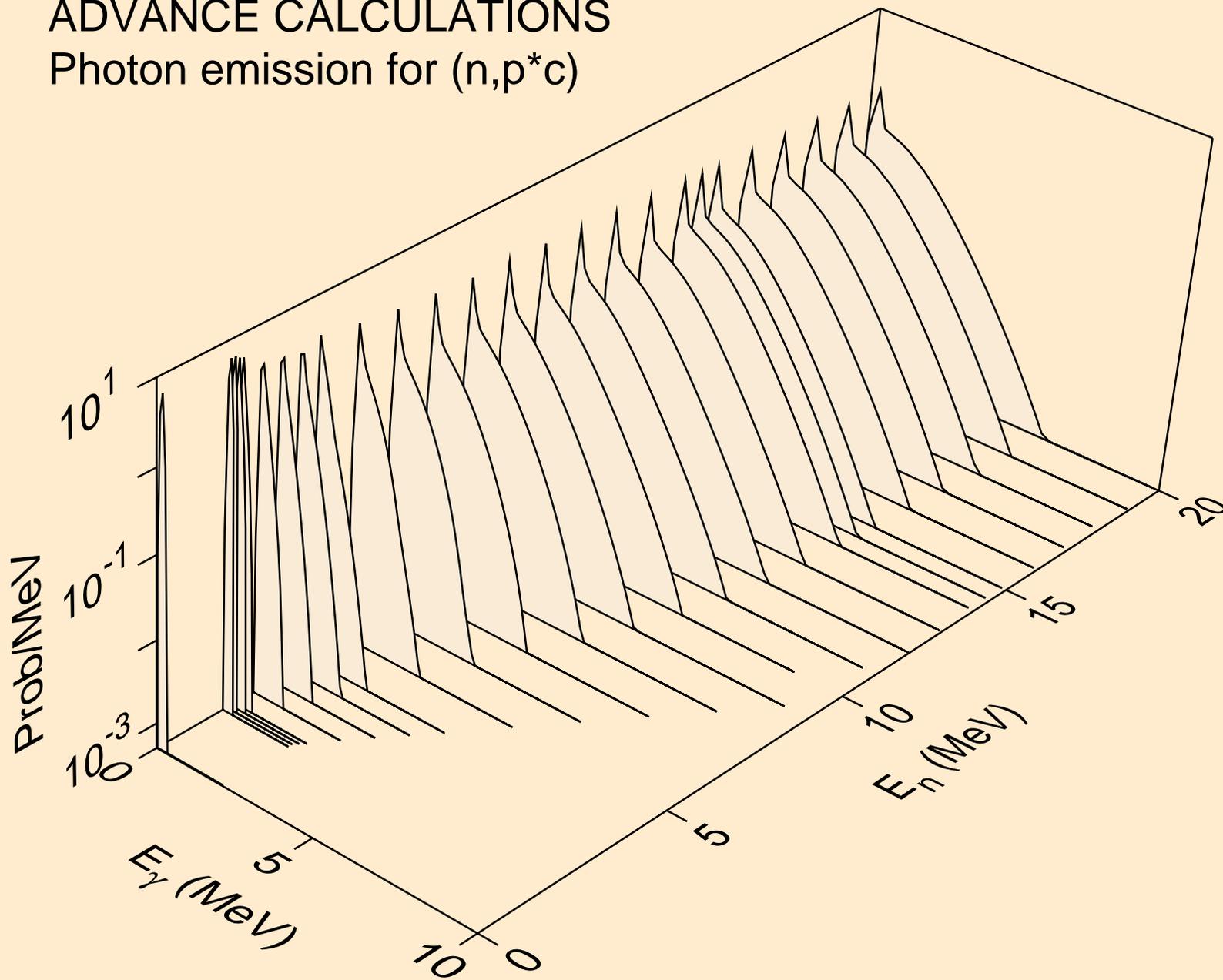
# ADVANCE CALCULATIONS

Photon emission for (n,gma)



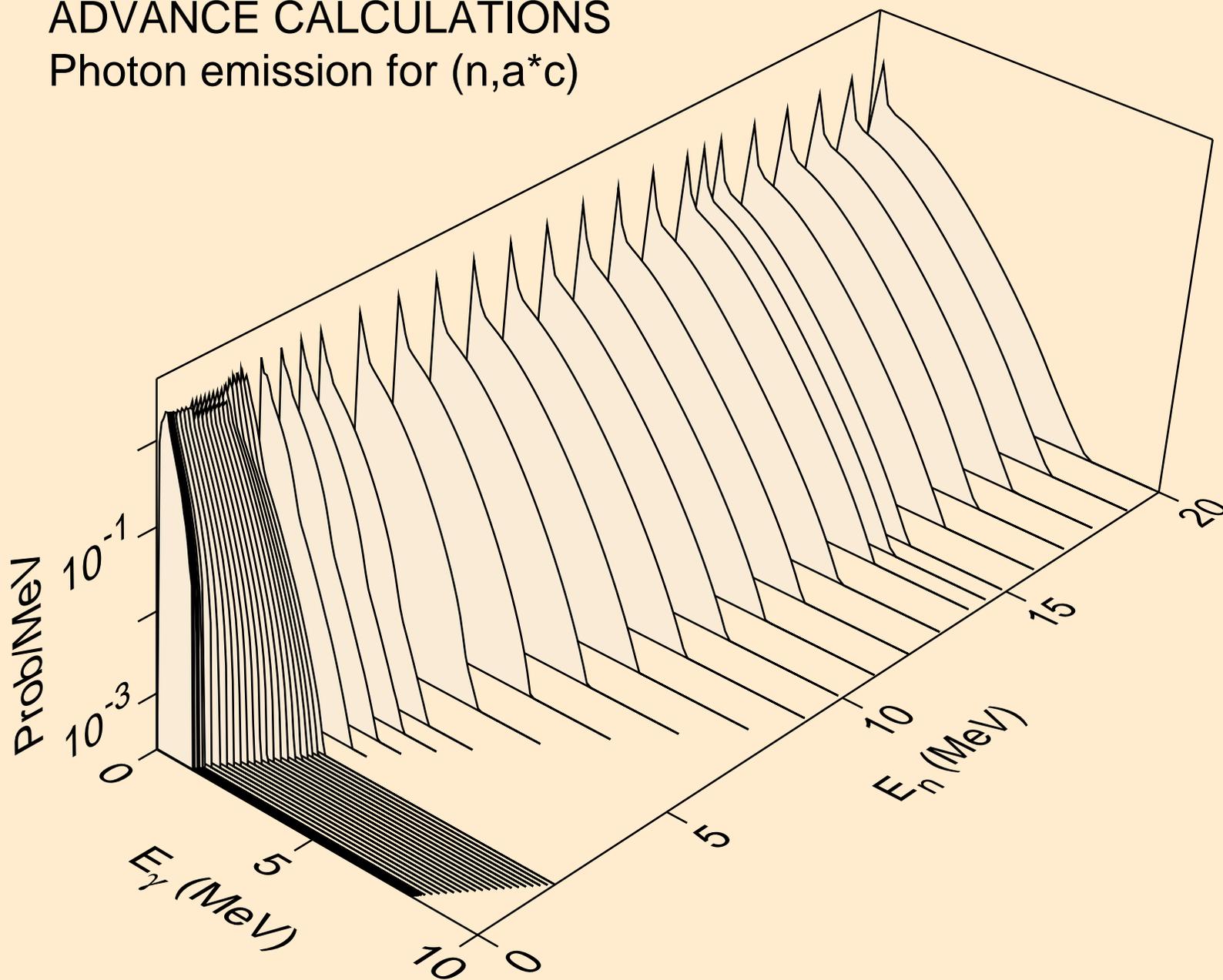
# ADVANCE CALCULATIONS

Photon emission for (n,p\*c)



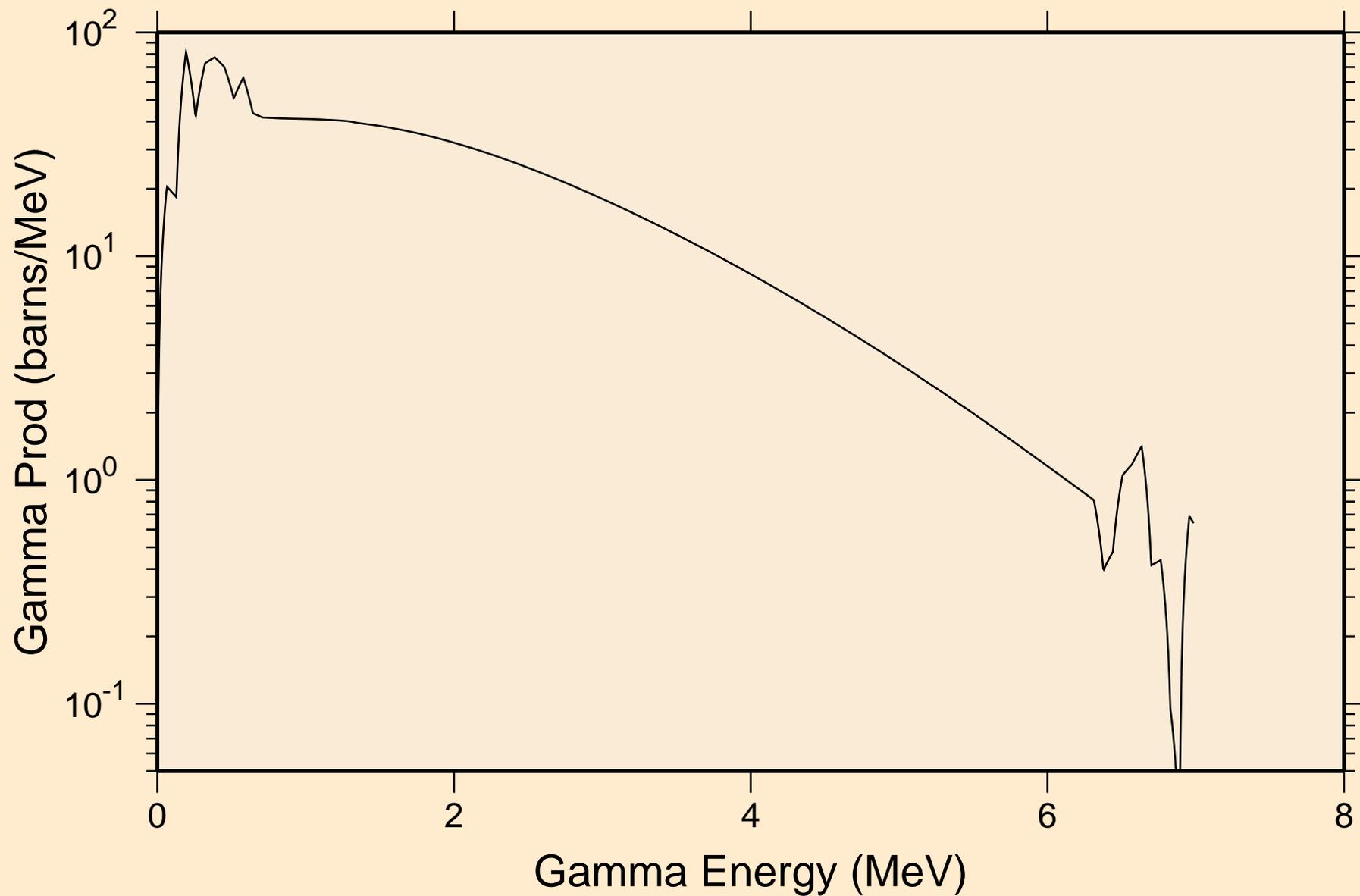
# ADVANCE CALCULATIONS

Photon emission for (n,a\*c)



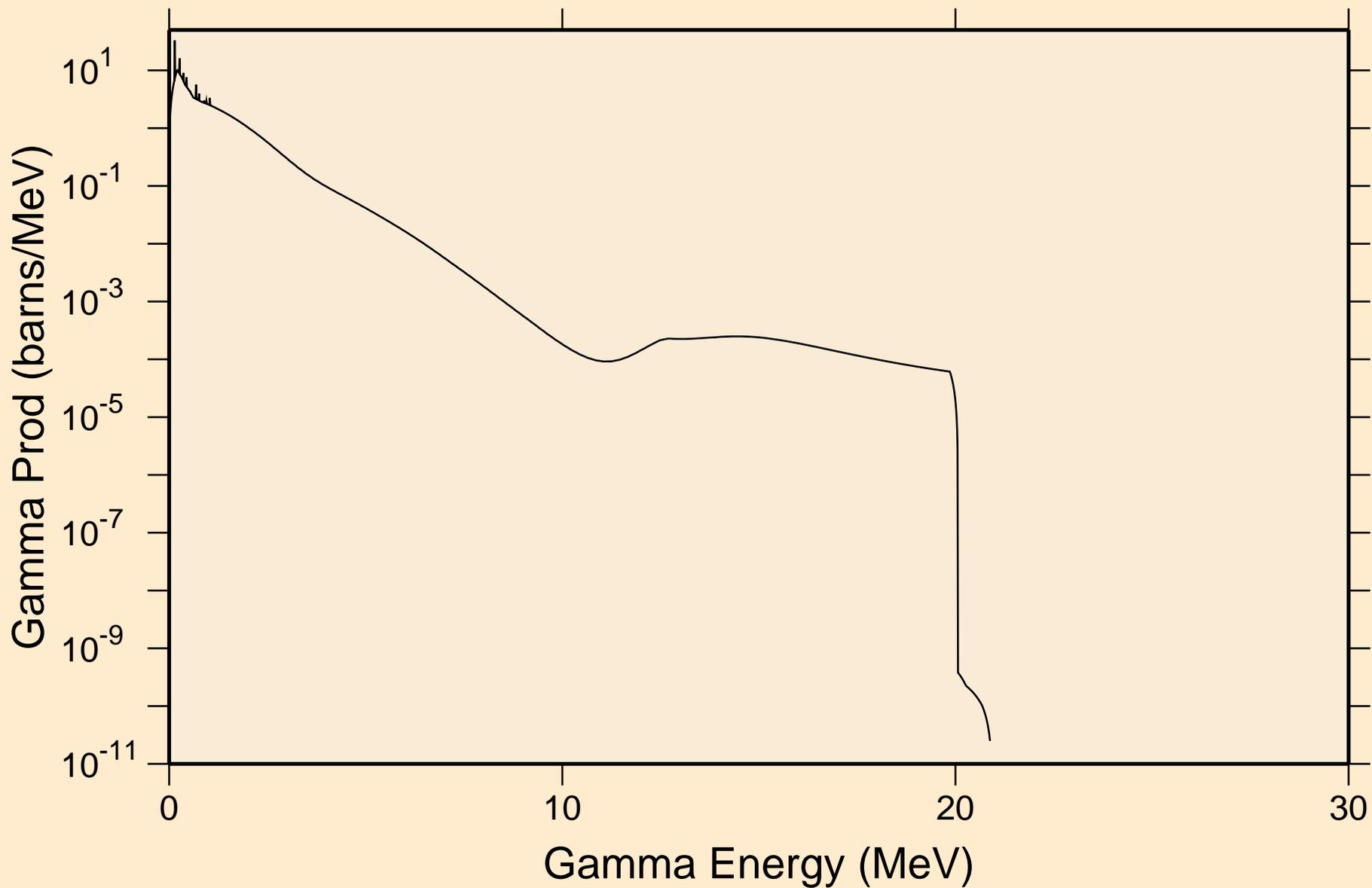
# ADVANCE CALCULATIONS

## thermal capture photon spectrum



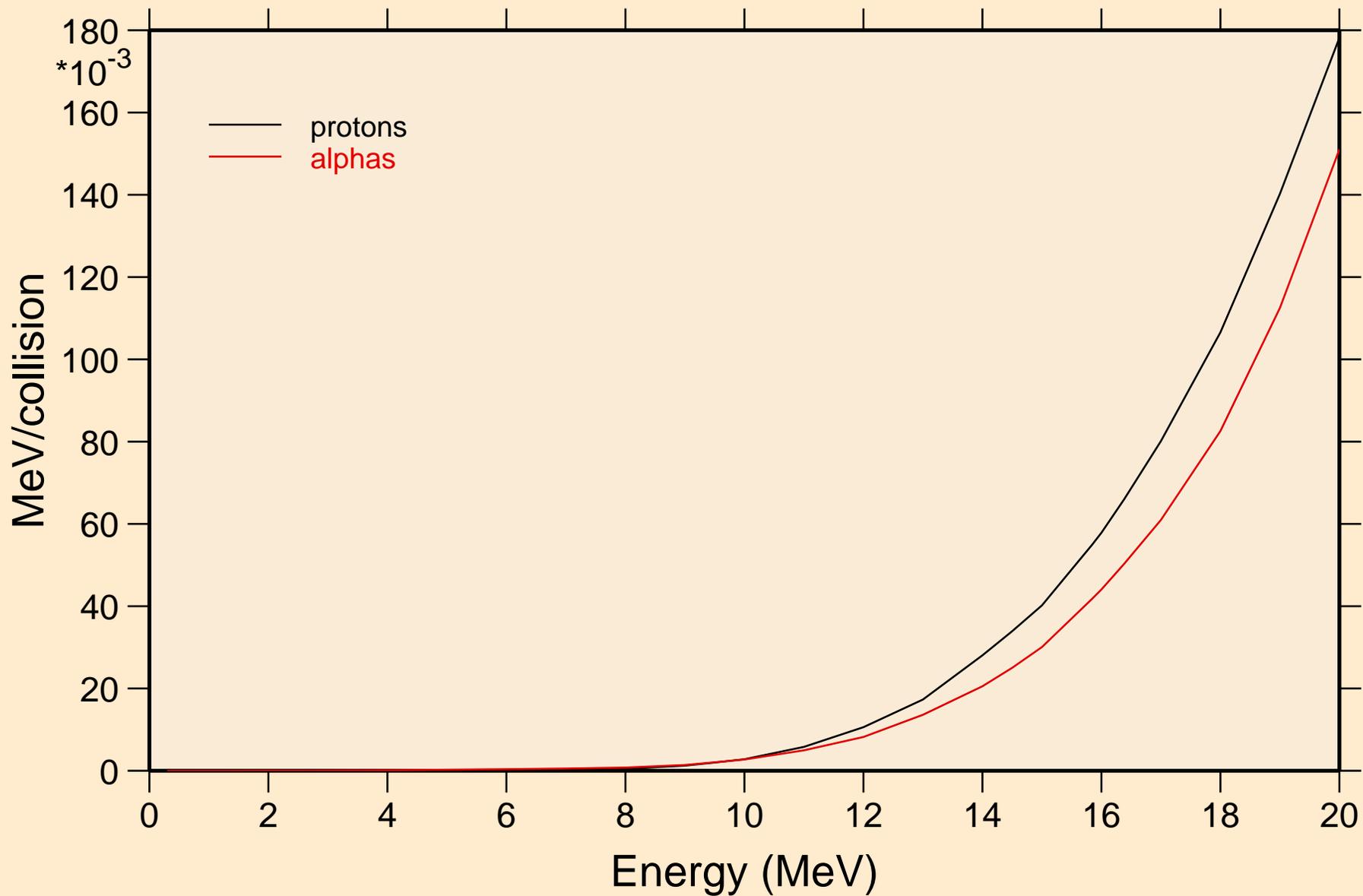
# ADVANCE CALCULATIONS

## 14 MeV photon spectrum



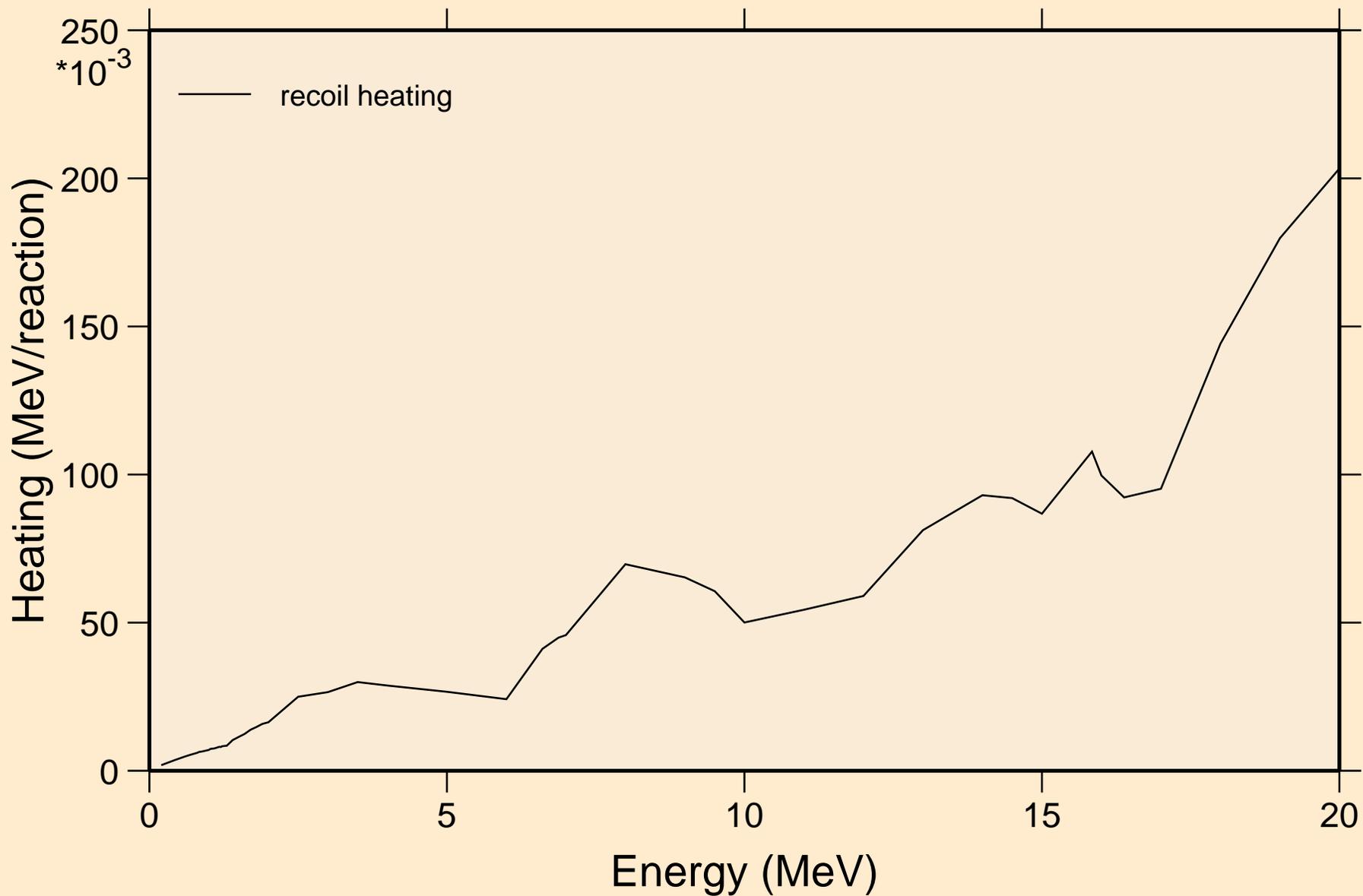
# ADVANCE CALCULATIONS

## Particle heating contributions



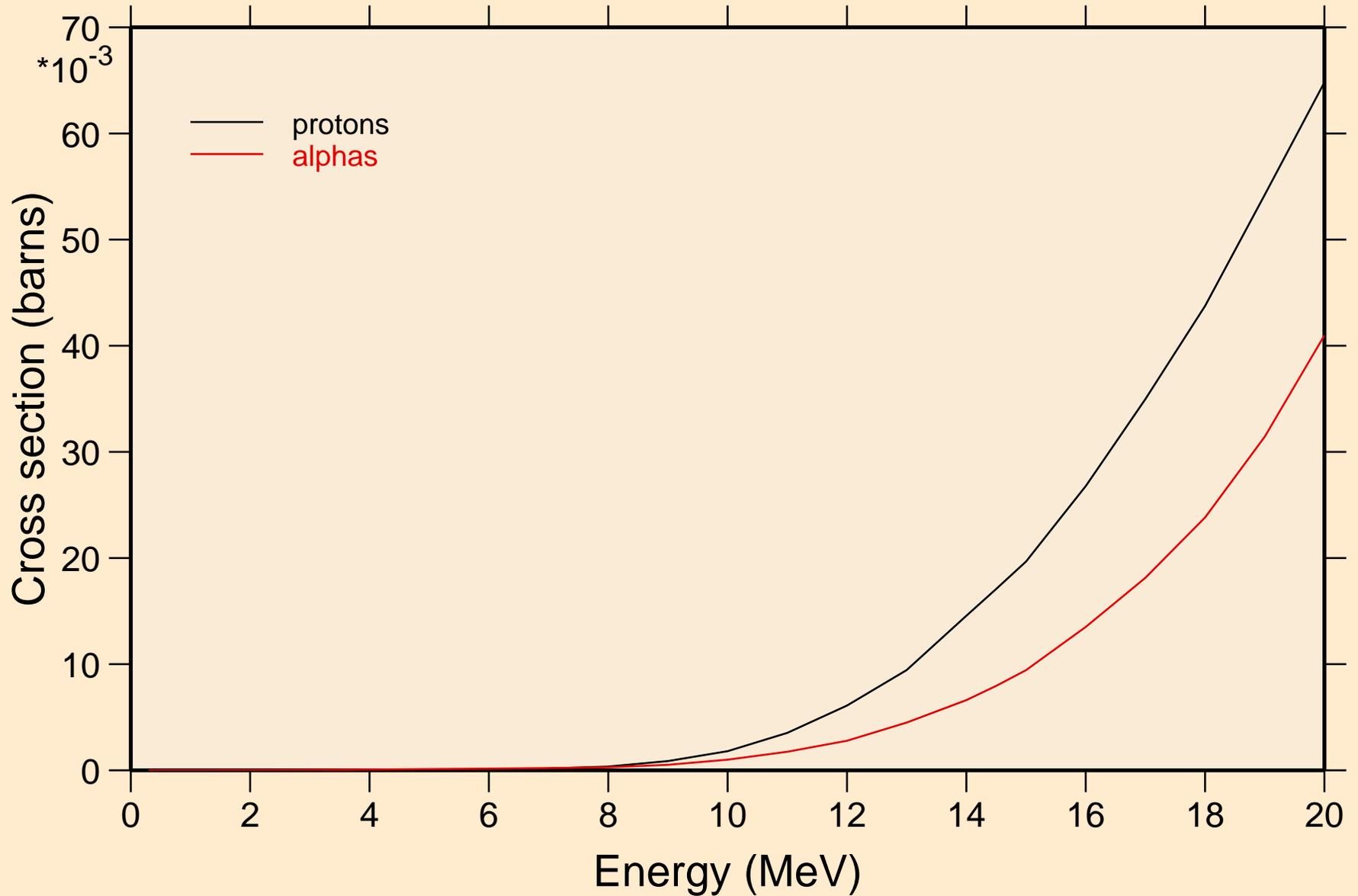
# ADVANCE CALCULATIONS

## Recoil Heating



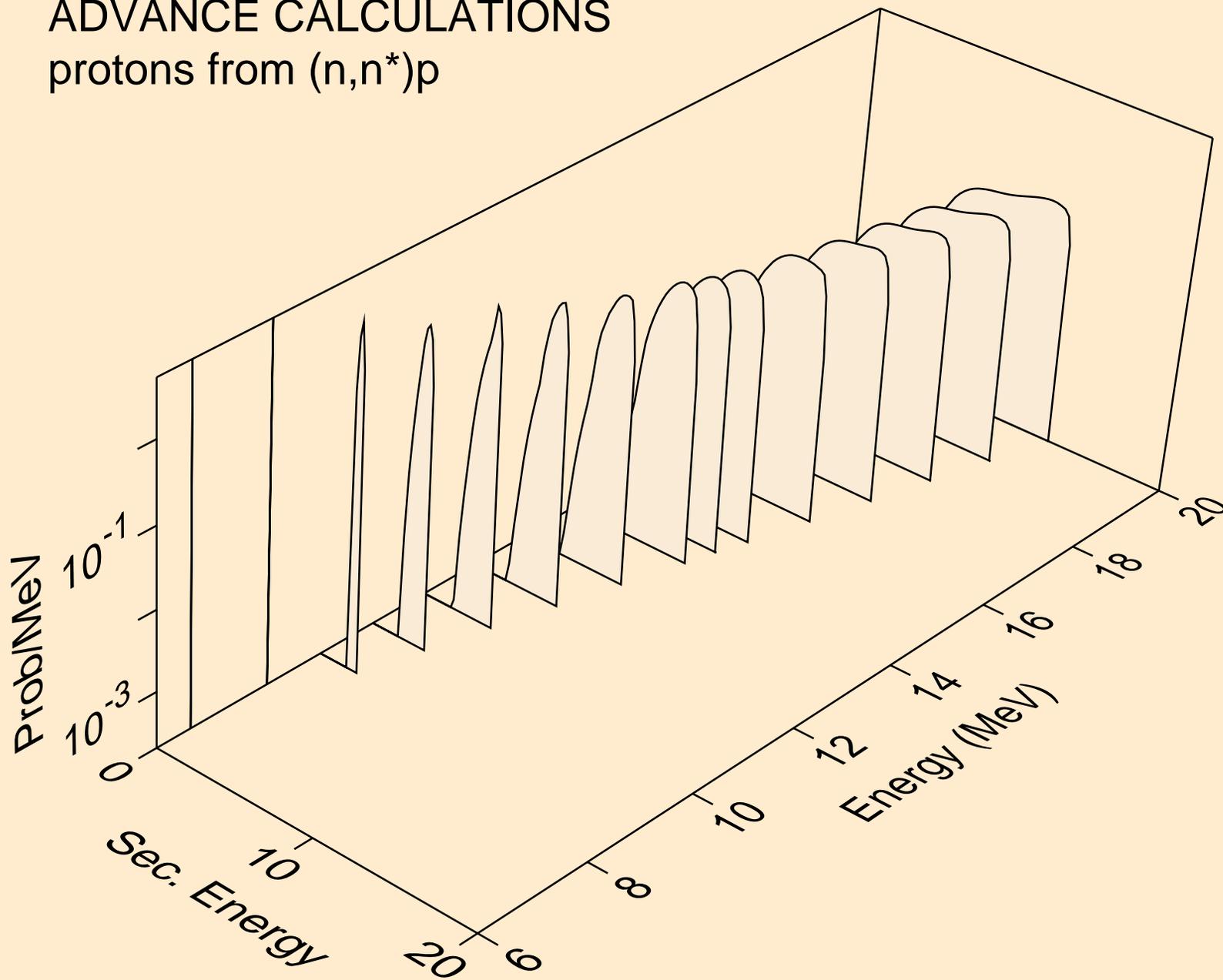
# ADVANCE CALCULATIONS

## Particle production cross sections



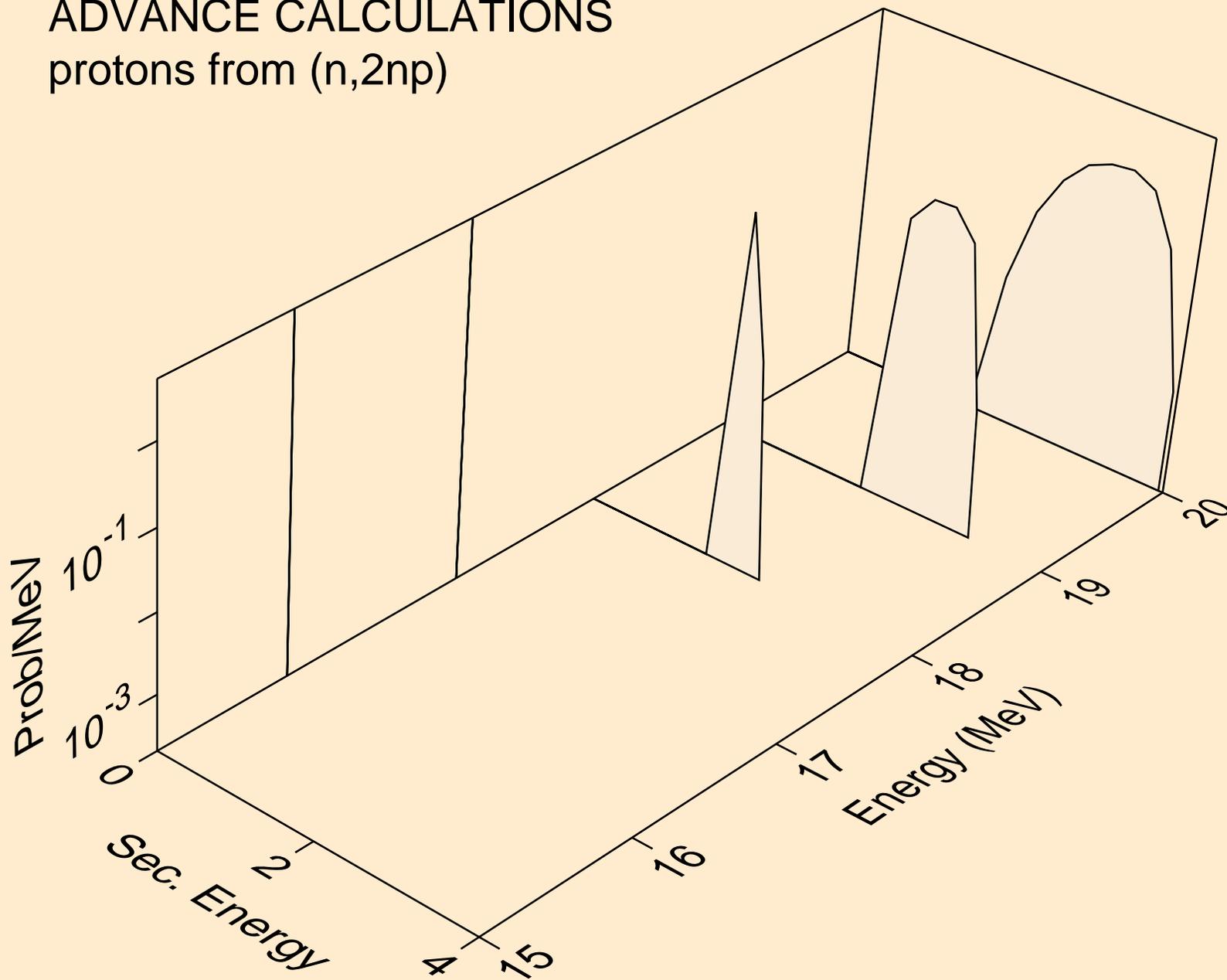
# ADVANCE CALCULATIONS

protons from  $(n,n^*)p$



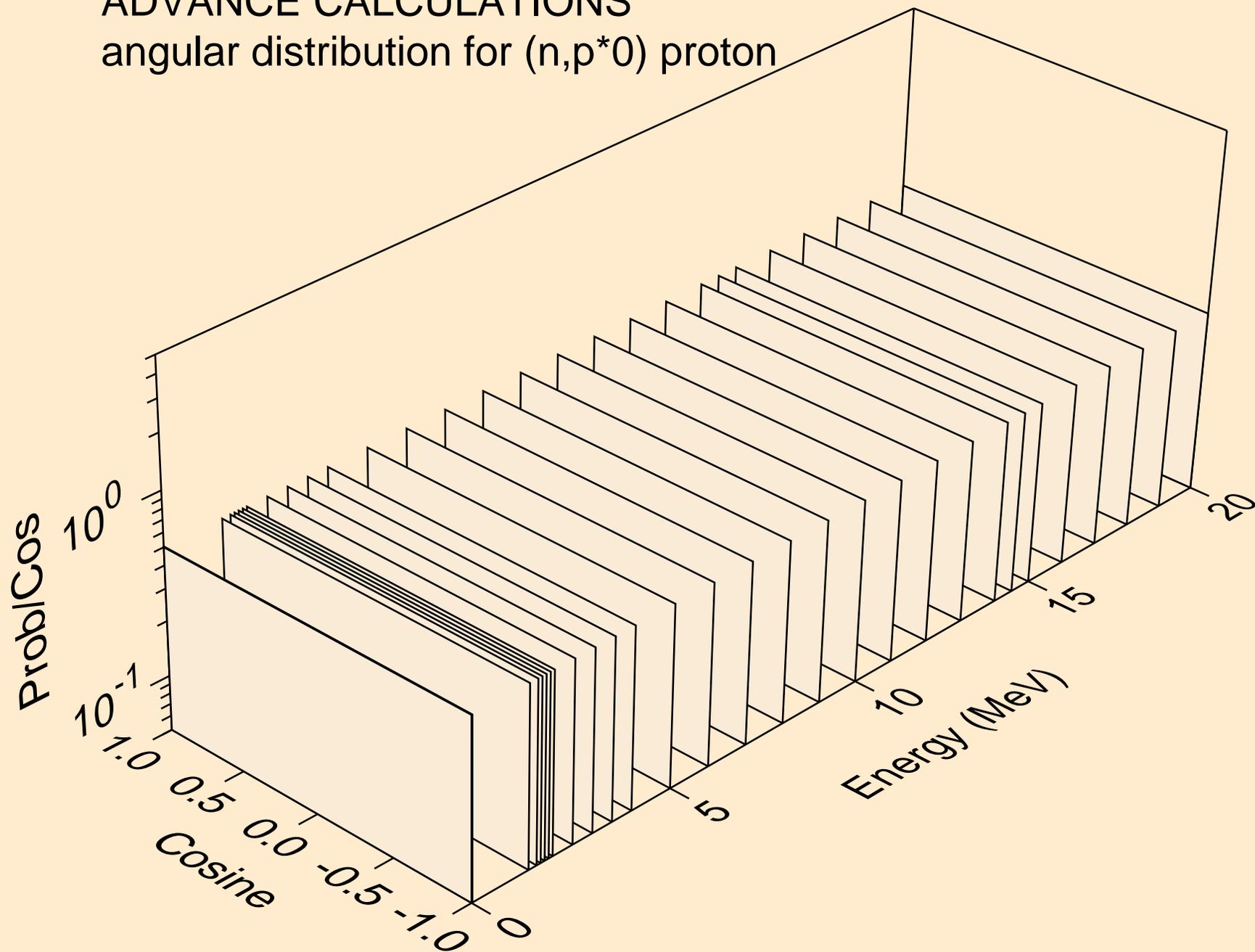
# ADVANCE CALCULATIONS

protons from (n,2np)



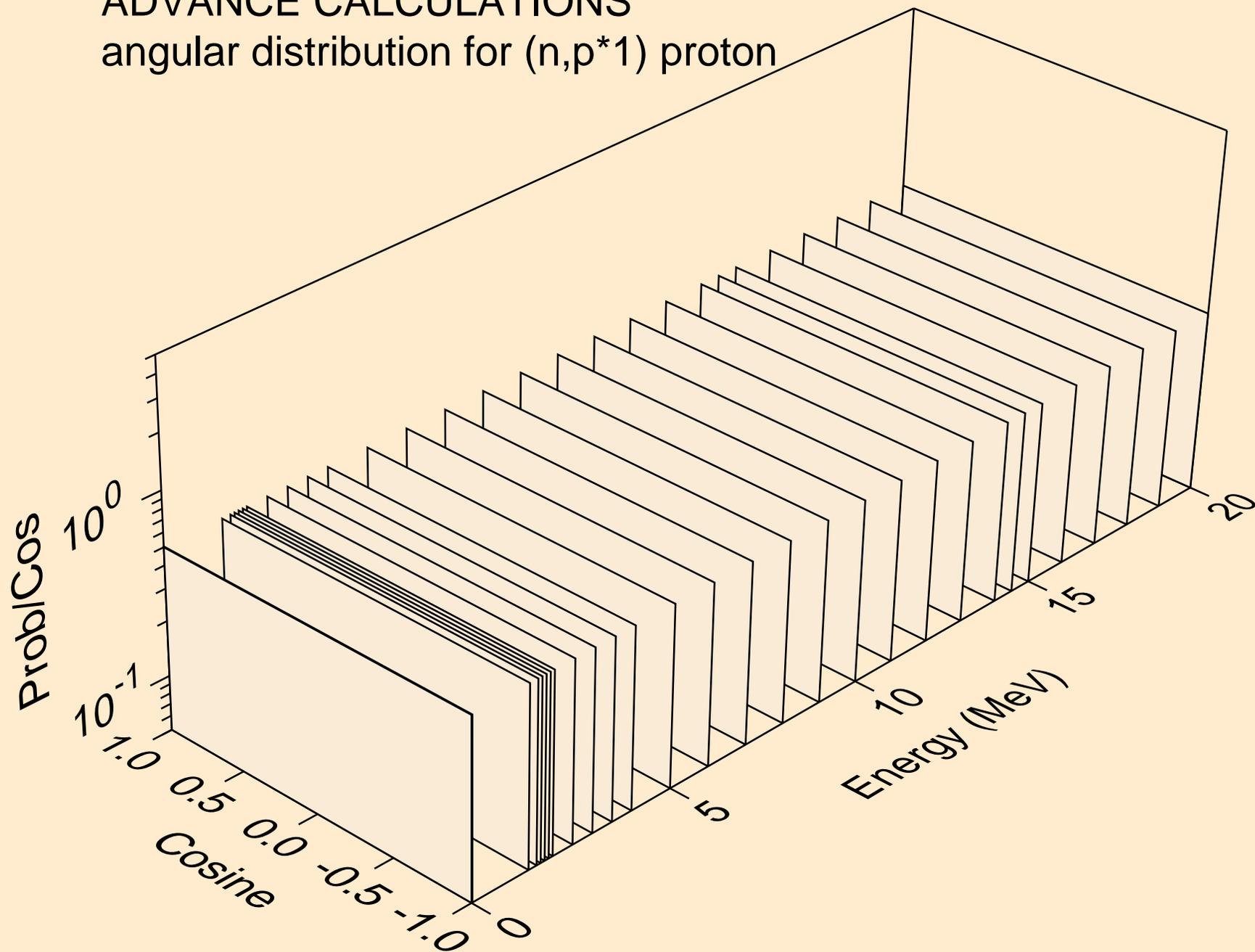
# ADVANCE CALCULATIONS

angular distribution for (n,p\*0) proton



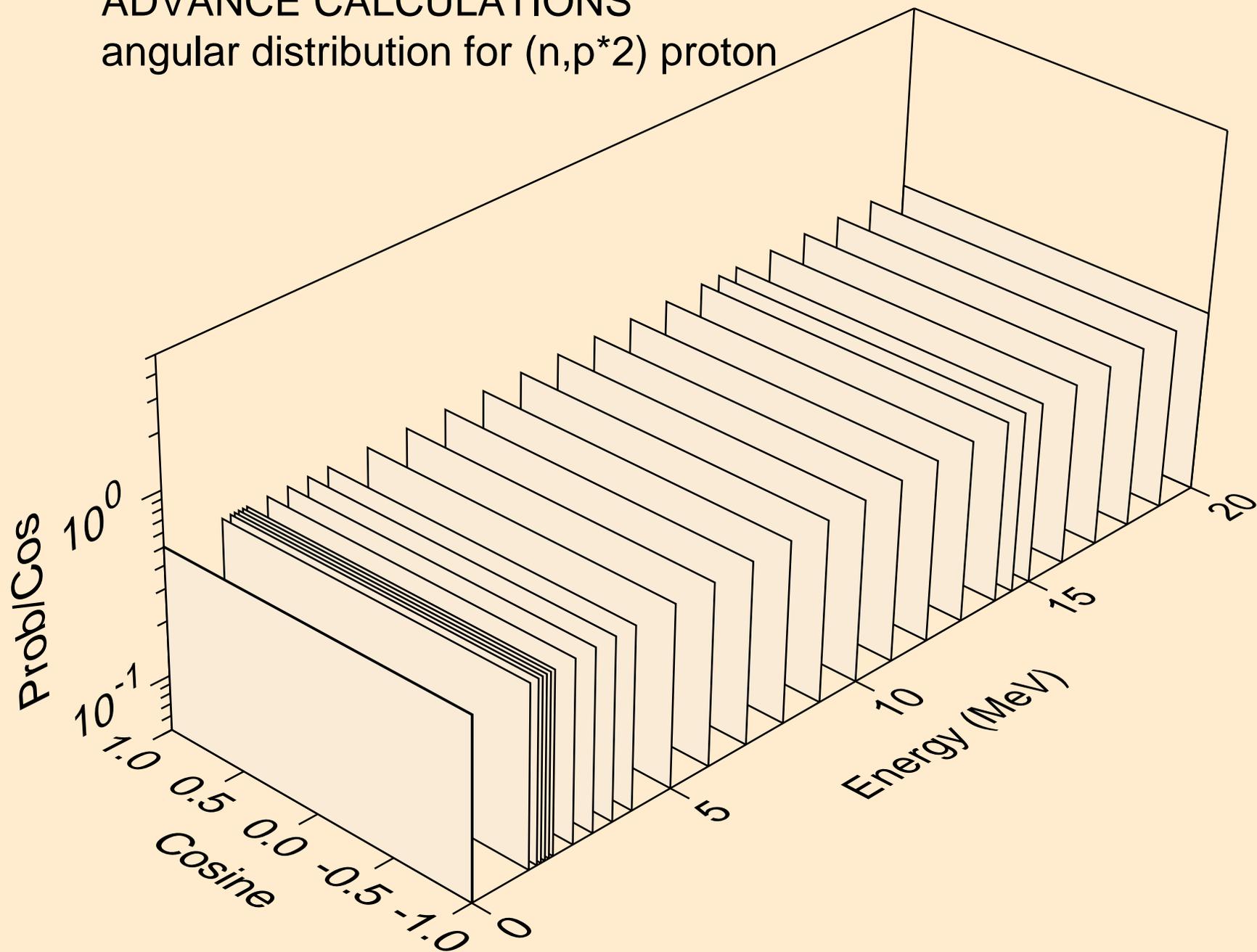
# ADVANCE CALCULATIONS

angular distribution for (n,p\*1) proton



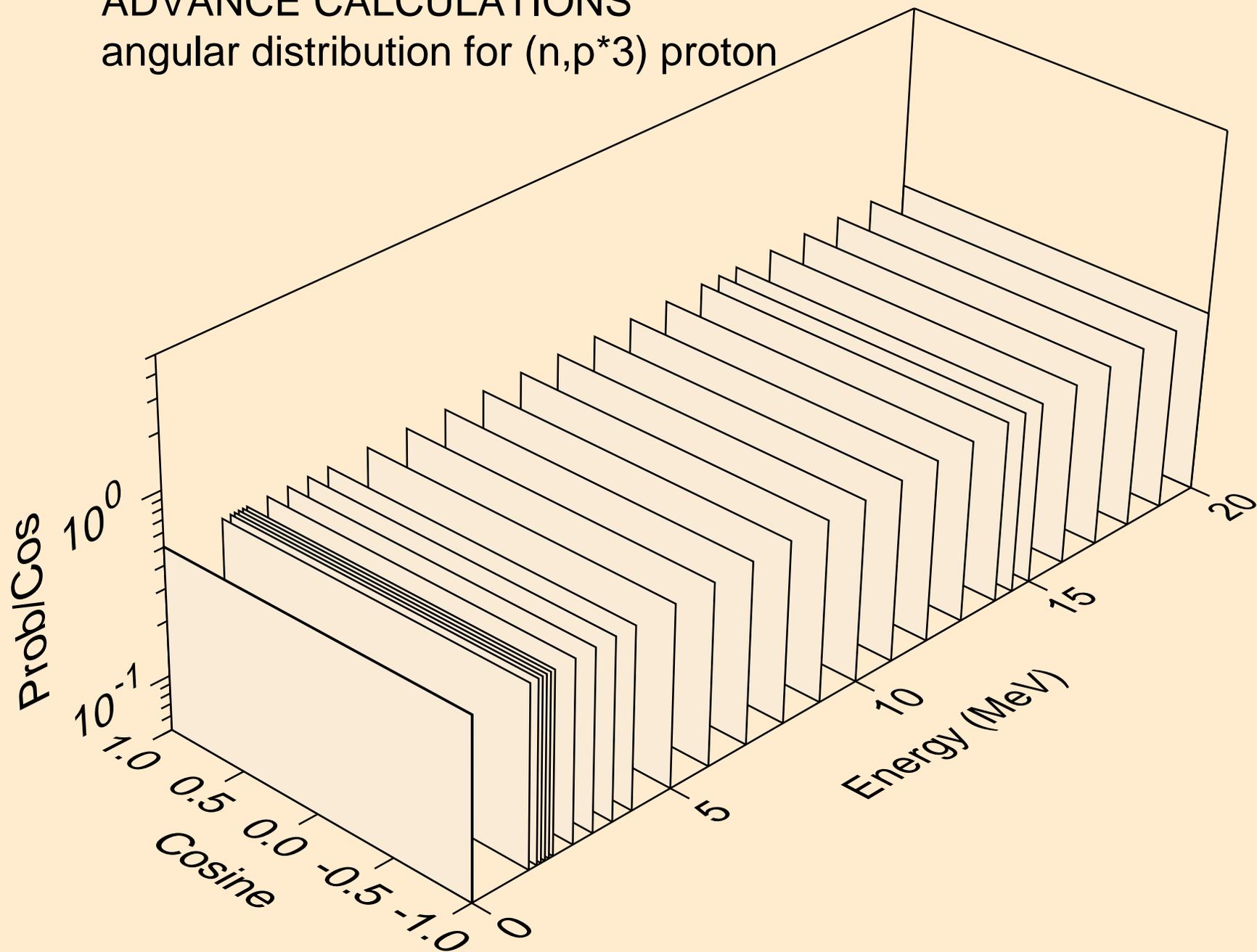
# ADVANCE CALCULATIONS

angular distribution for (n,p\*2) proton



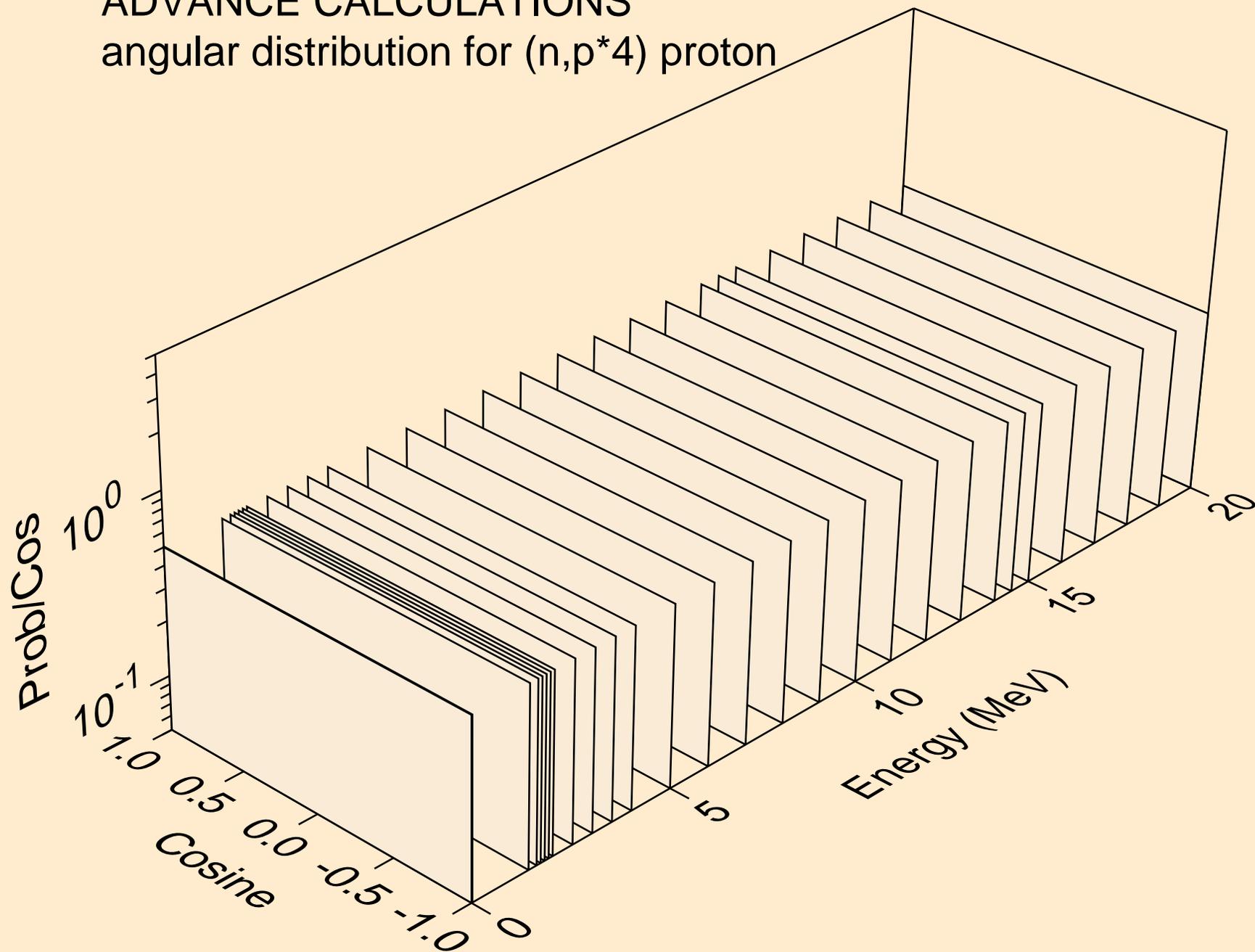
# ADVANCE CALCULATIONS

angular distribution for (n,p\*3) proton

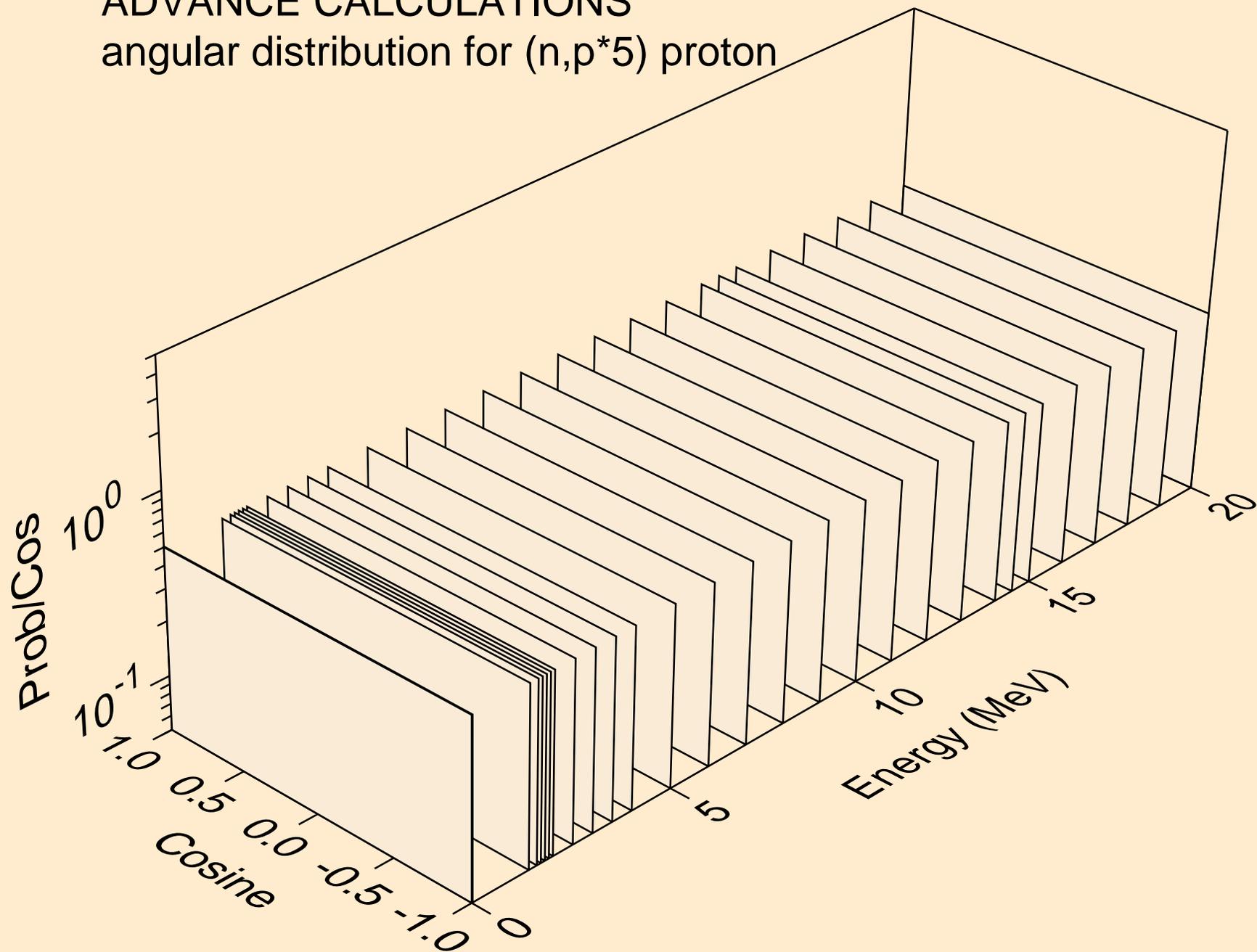


# ADVANCE CALCULATIONS

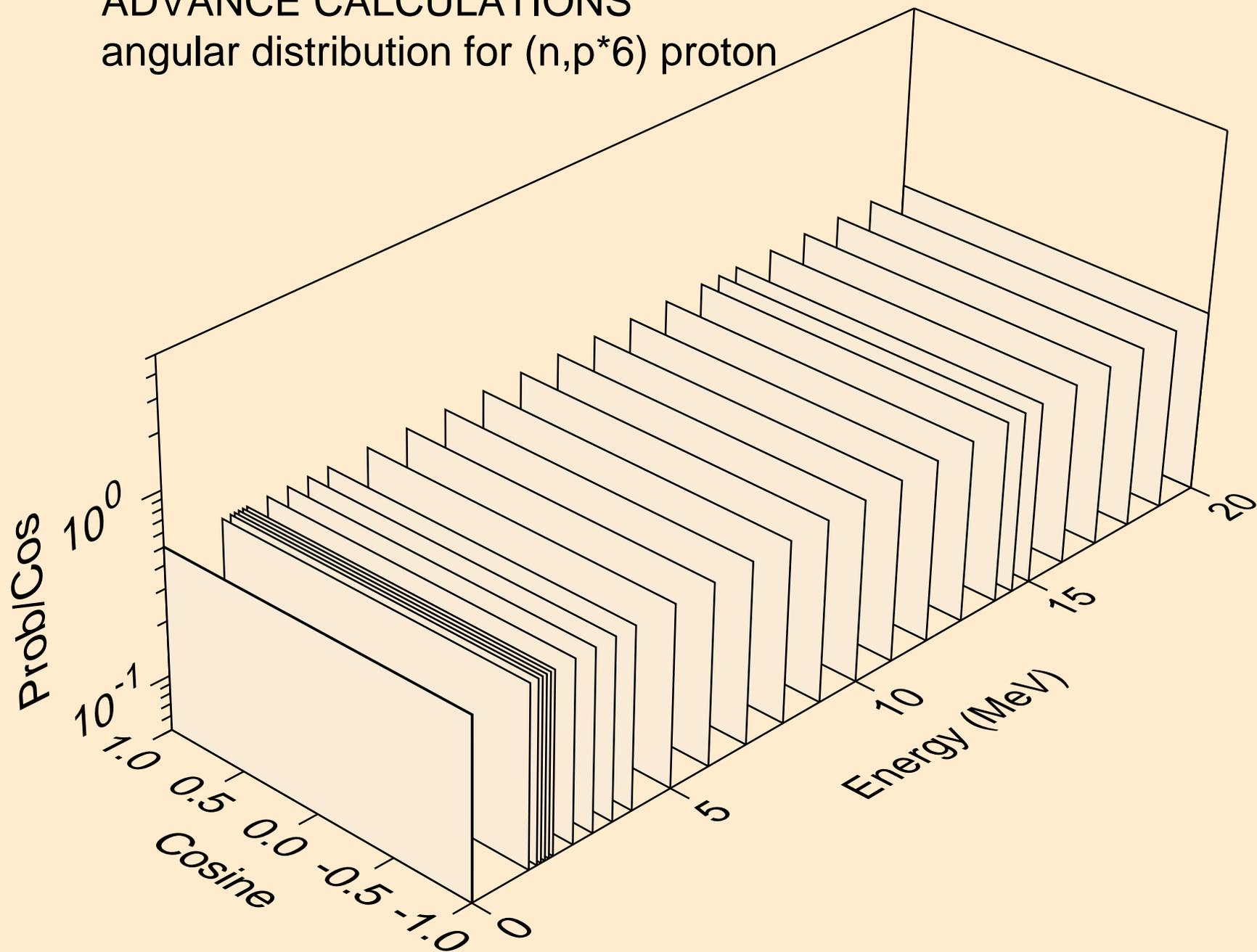
angular distribution for (n,p\*4) proton



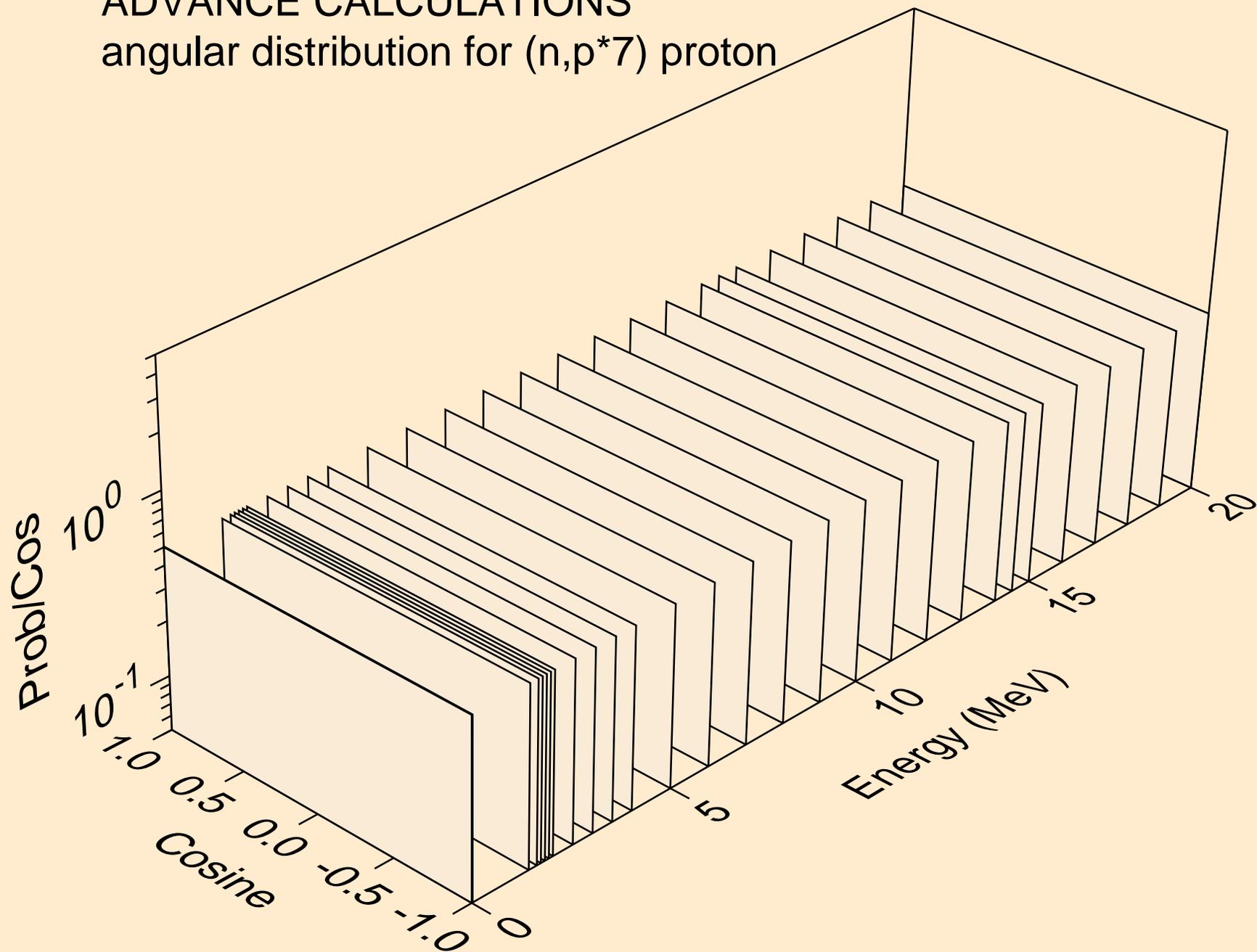
ADVANCE CALCULATIONS  
angular distribution for (n,p\*5) proton



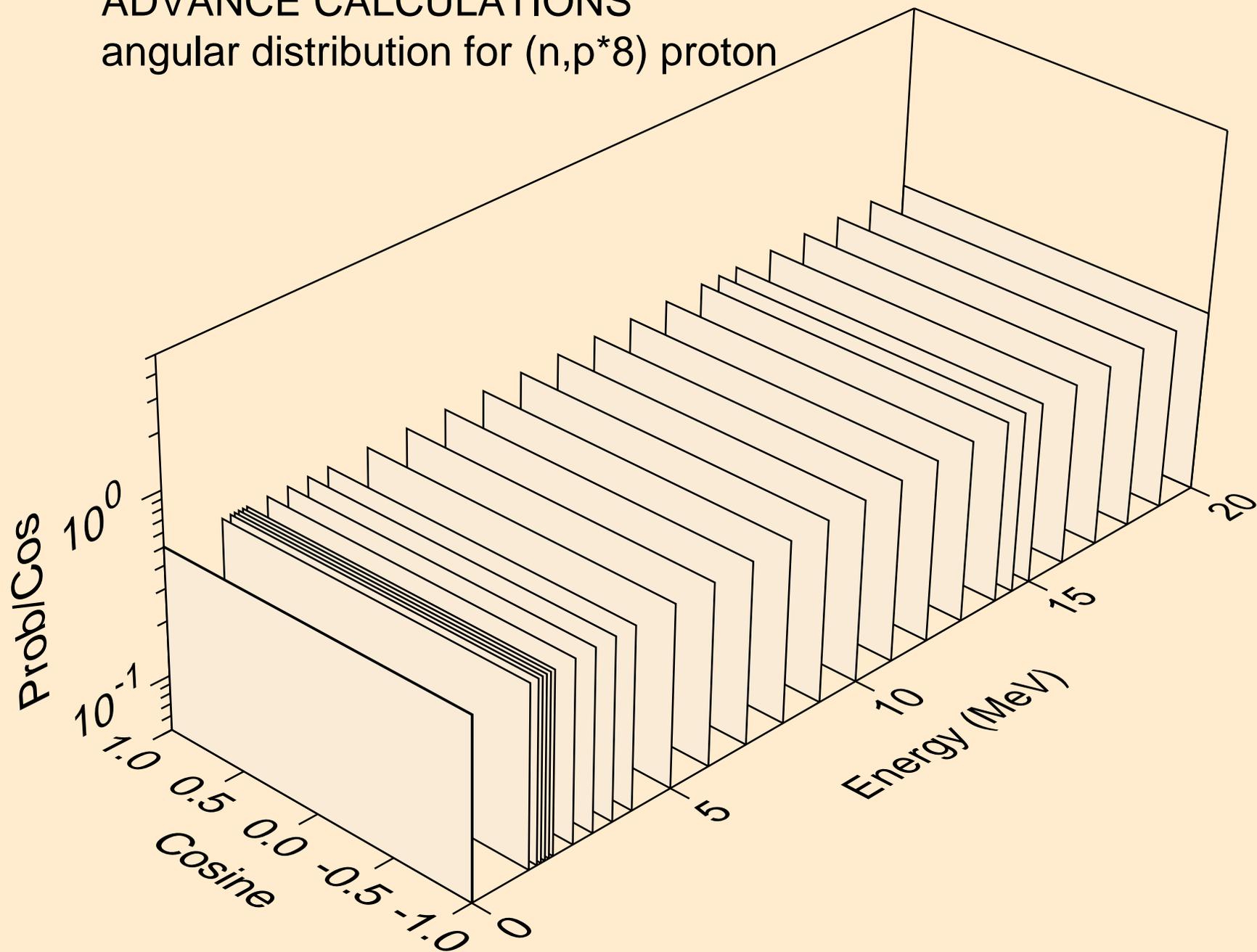
ADVANCE CALCULATIONS  
angular distribution for (n,p\*6) proton



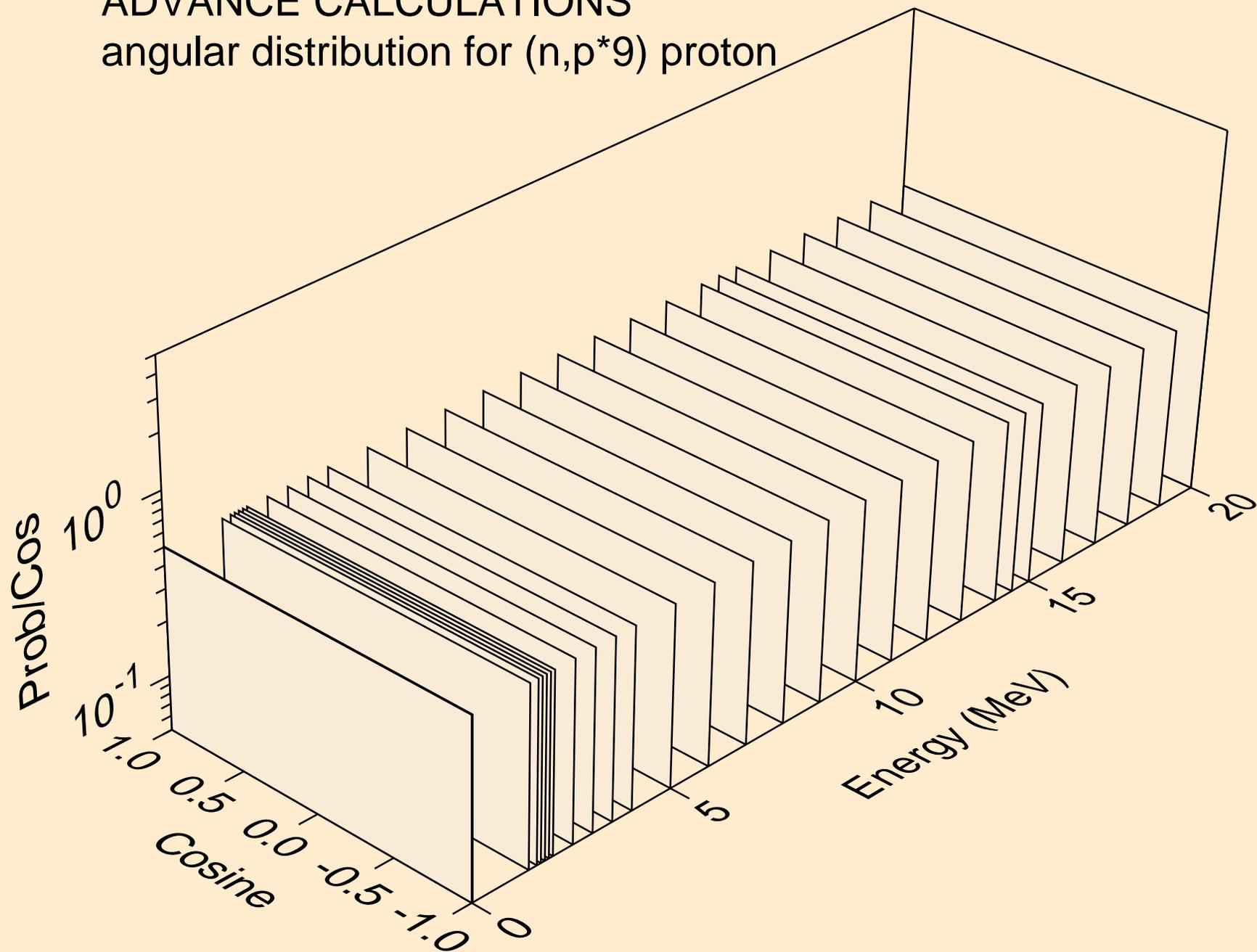
ADVANCE CALCULATIONS  
angular distribution for (n,p\*7) proton



ADVANCE CALCULATIONS  
angular distribution for (n,p\*8) proton

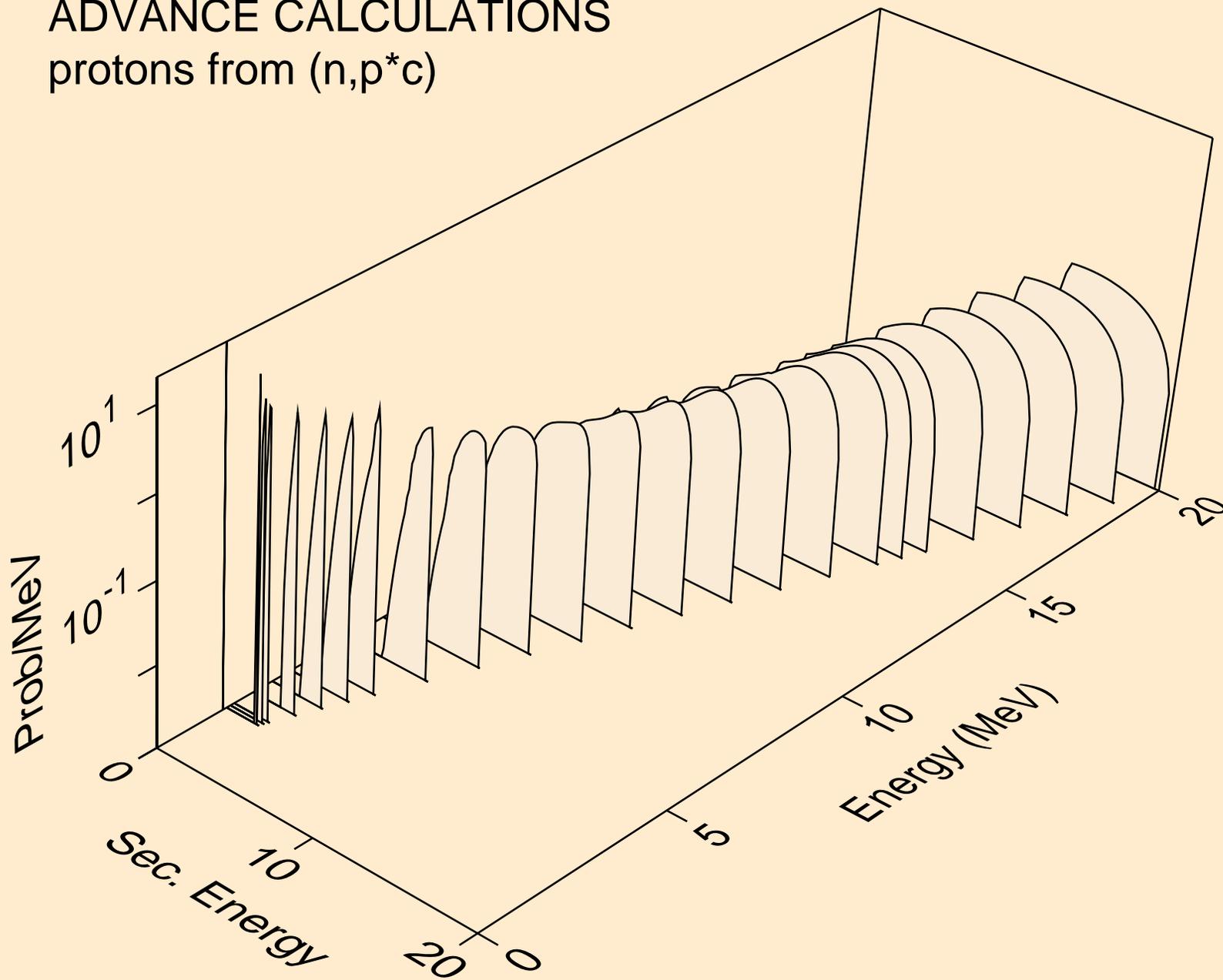


ADVANCE CALCULATIONS  
angular distribution for (n,p\*9) proton



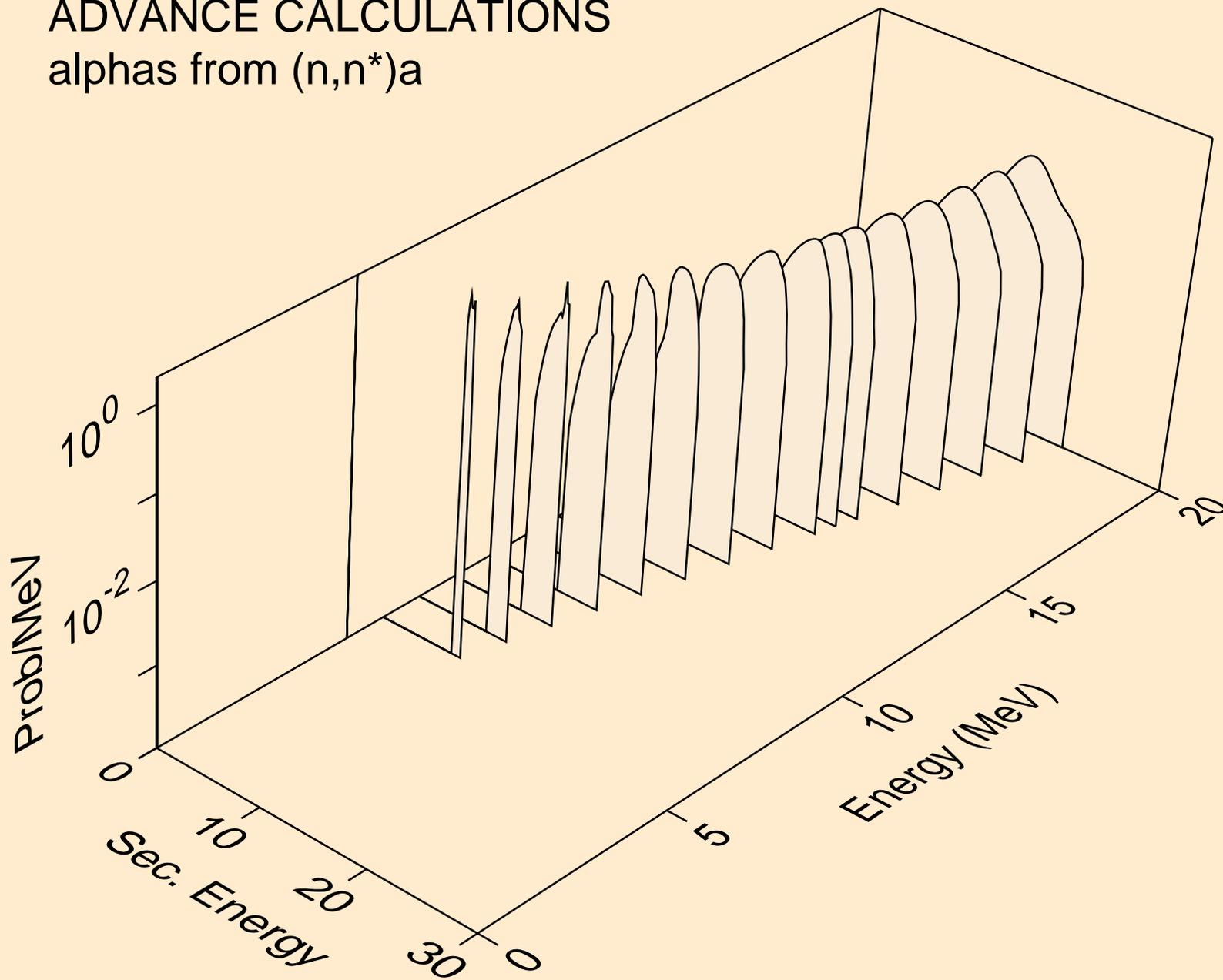
# ADVANCE CALCULATIONS

protons from  $(n,p^*c)$



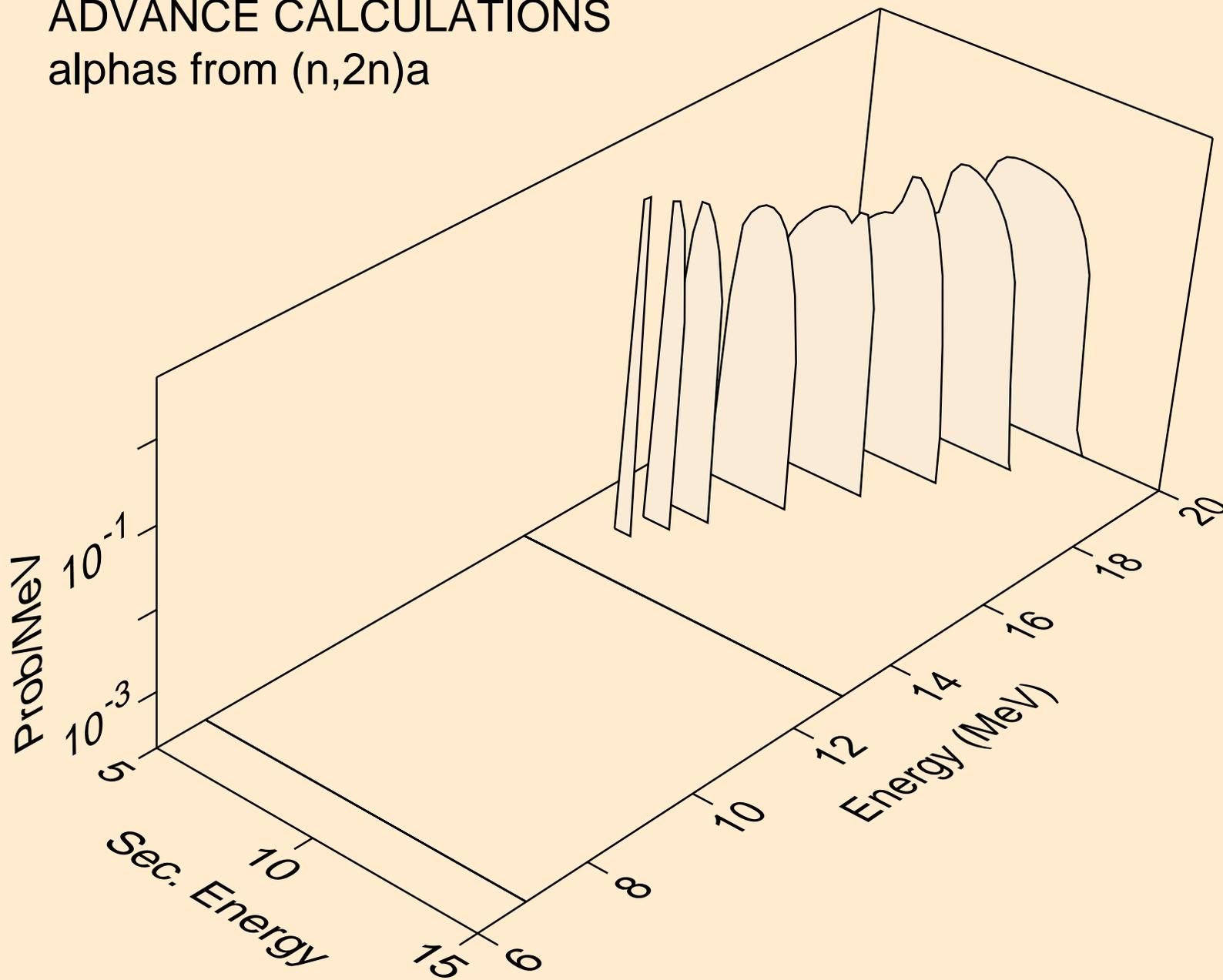
# ADVANCE CALCULATIONS

alphas from (n,n\*)a

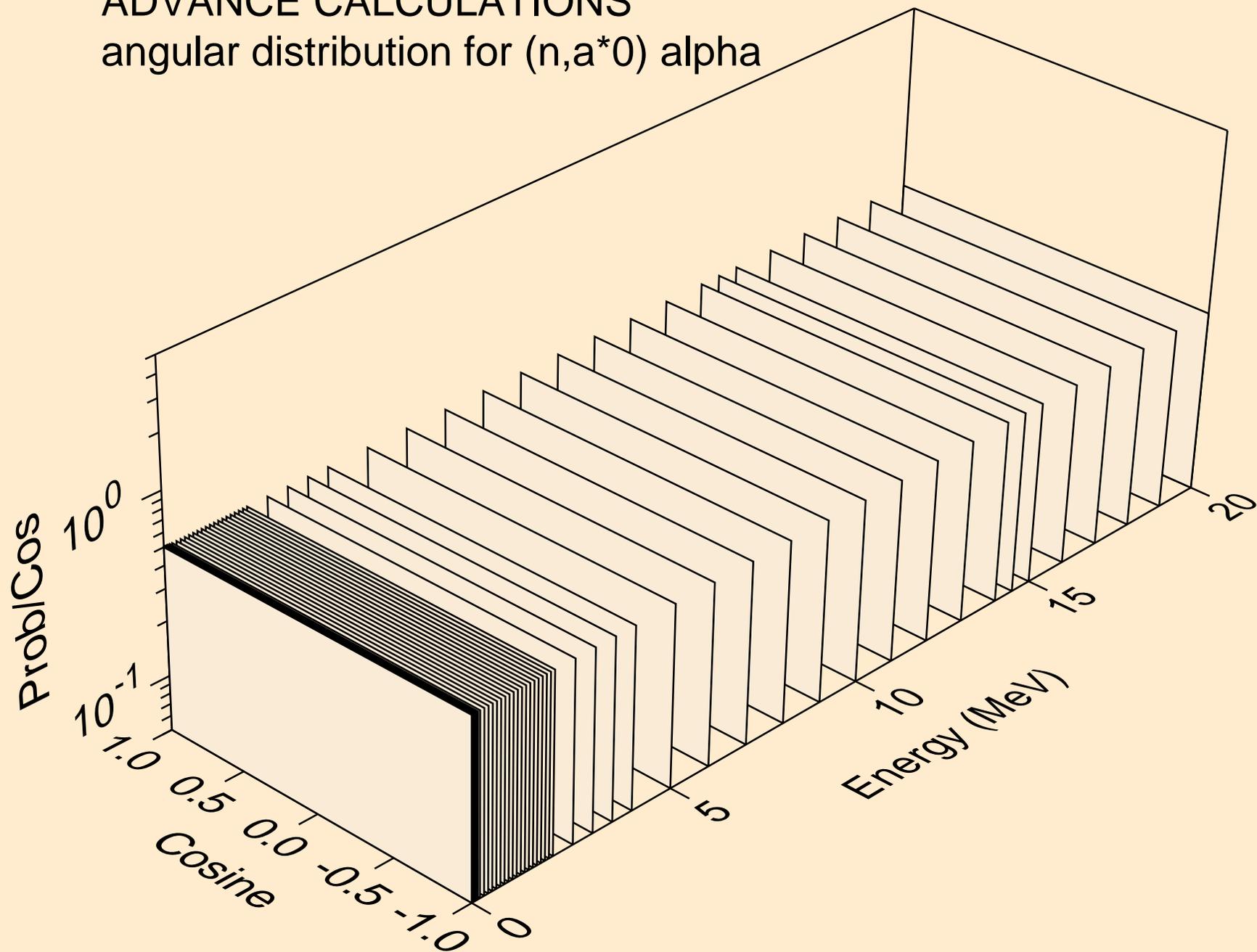


# ADVANCE CALCULATIONS

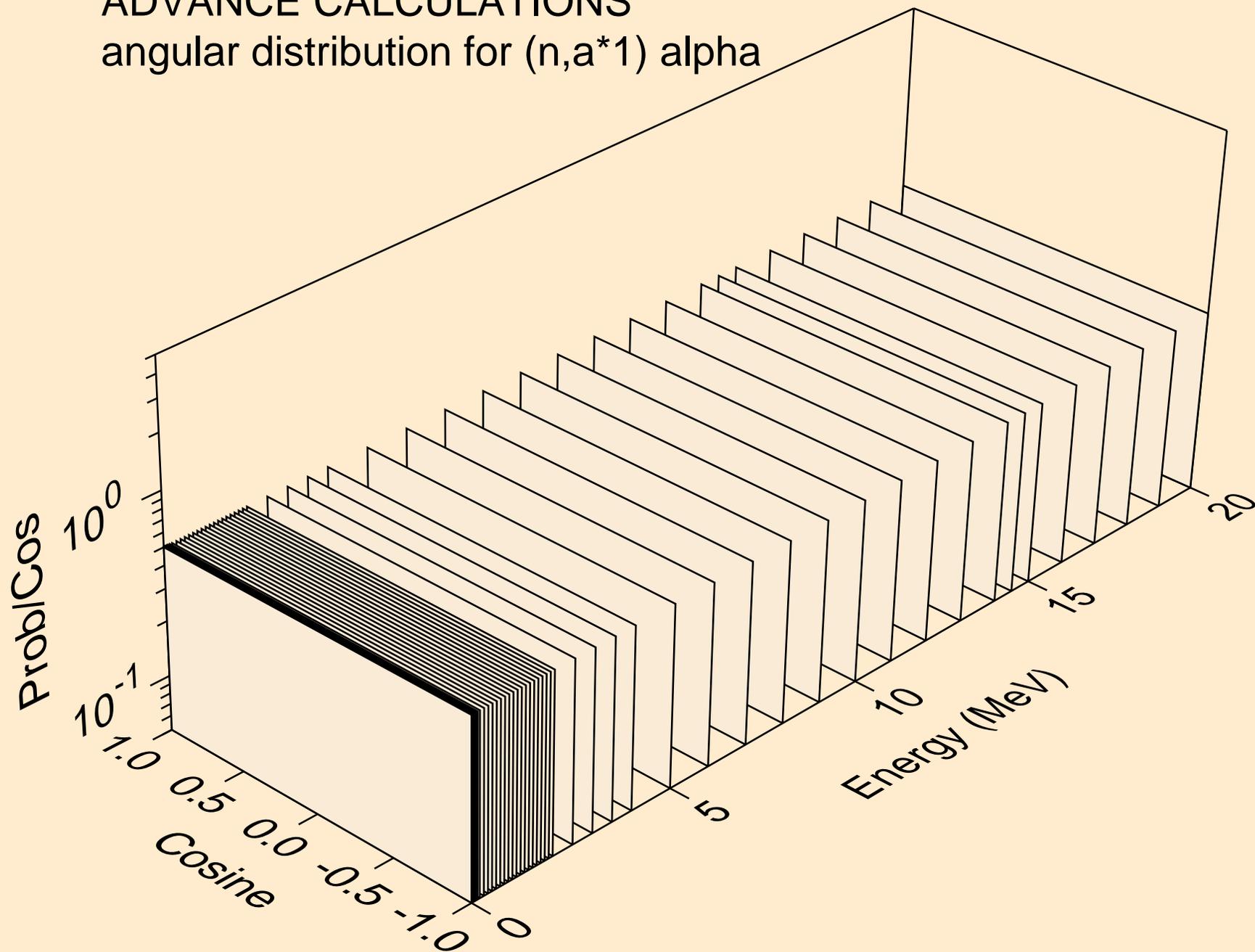
alphas from (n,2n)a



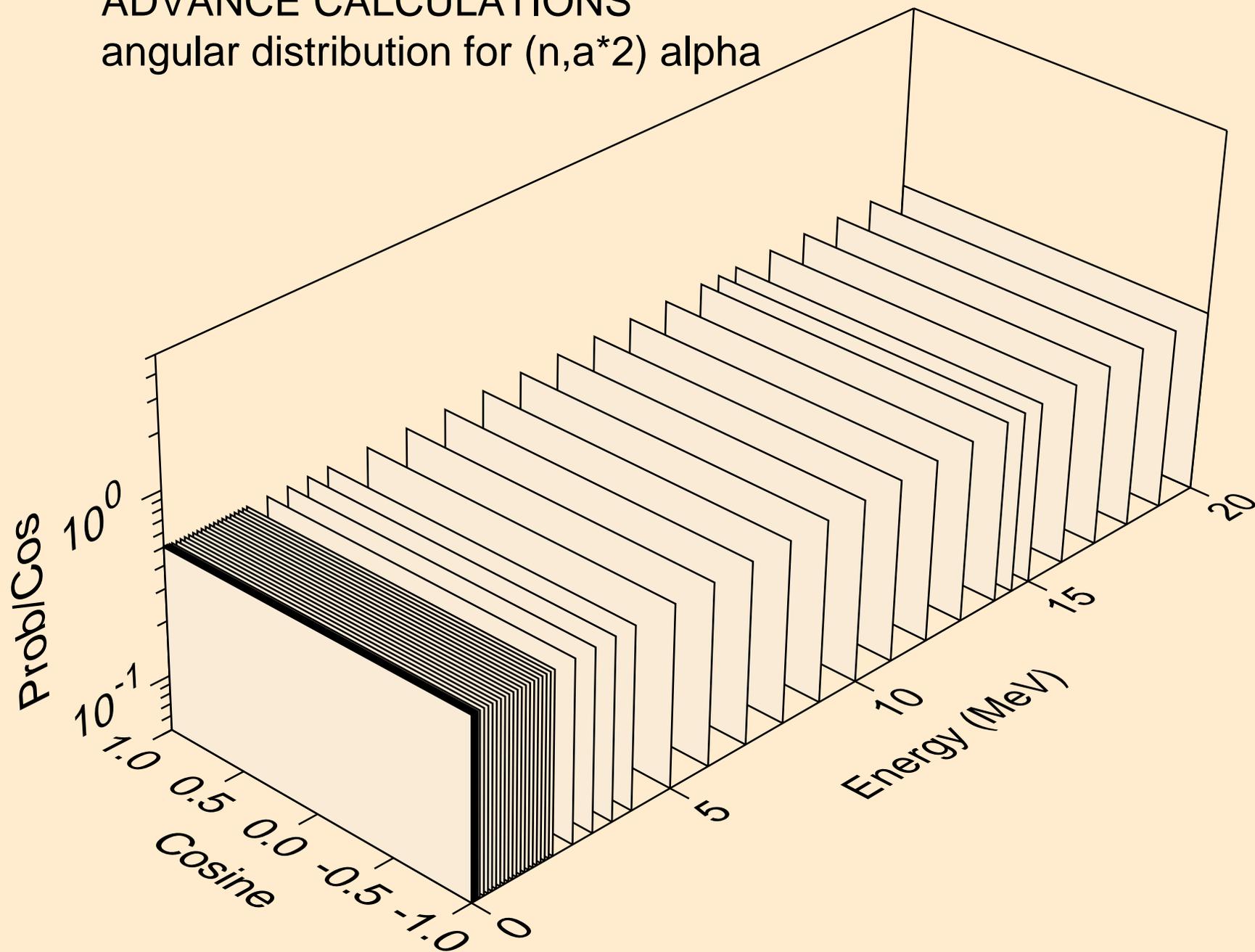
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ ) alpha



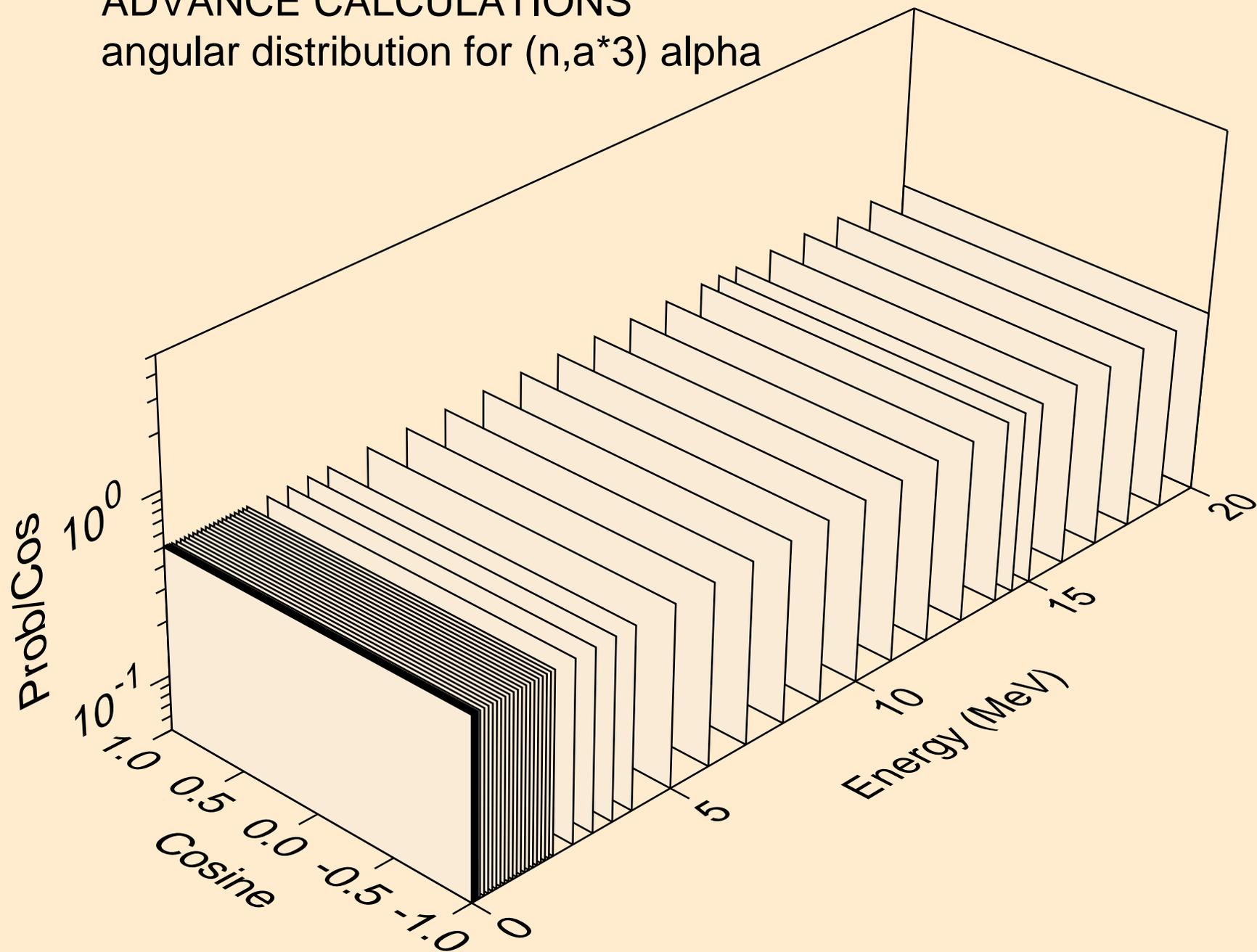
ADVANCE CALCULATIONS  
angular distribution for (n,a\*1) alpha



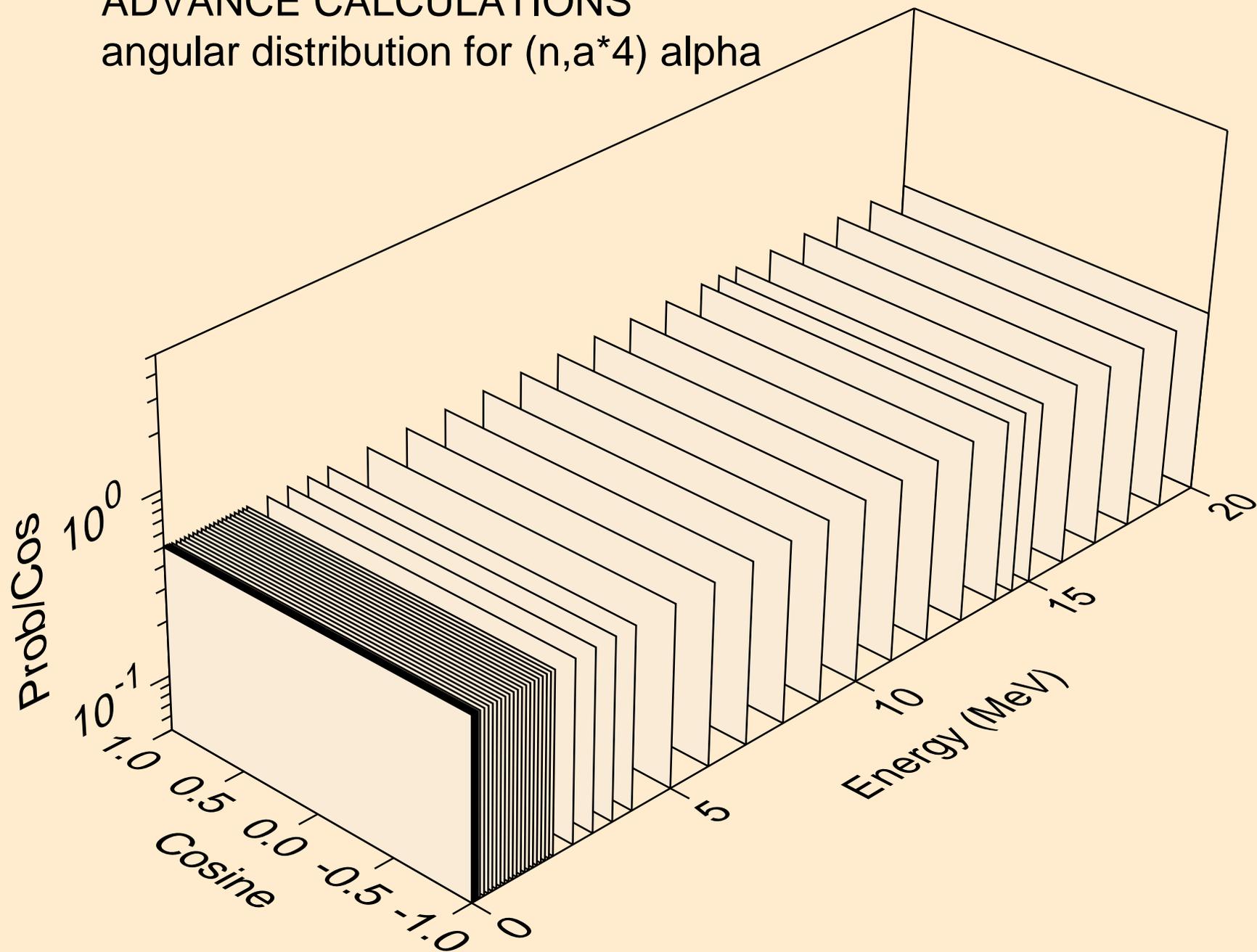
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ ) alpha



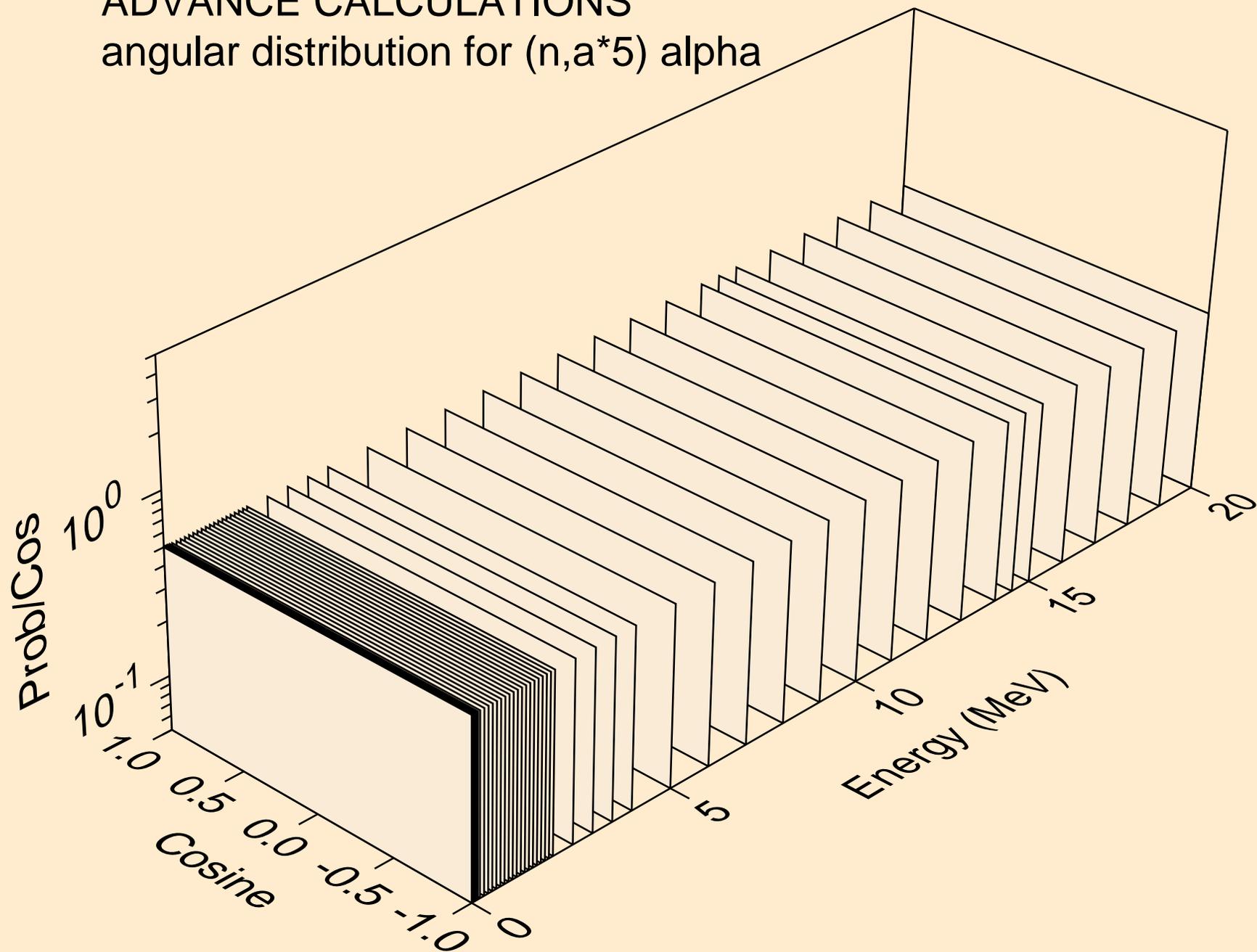
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ ) alpha



ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ ) alpha

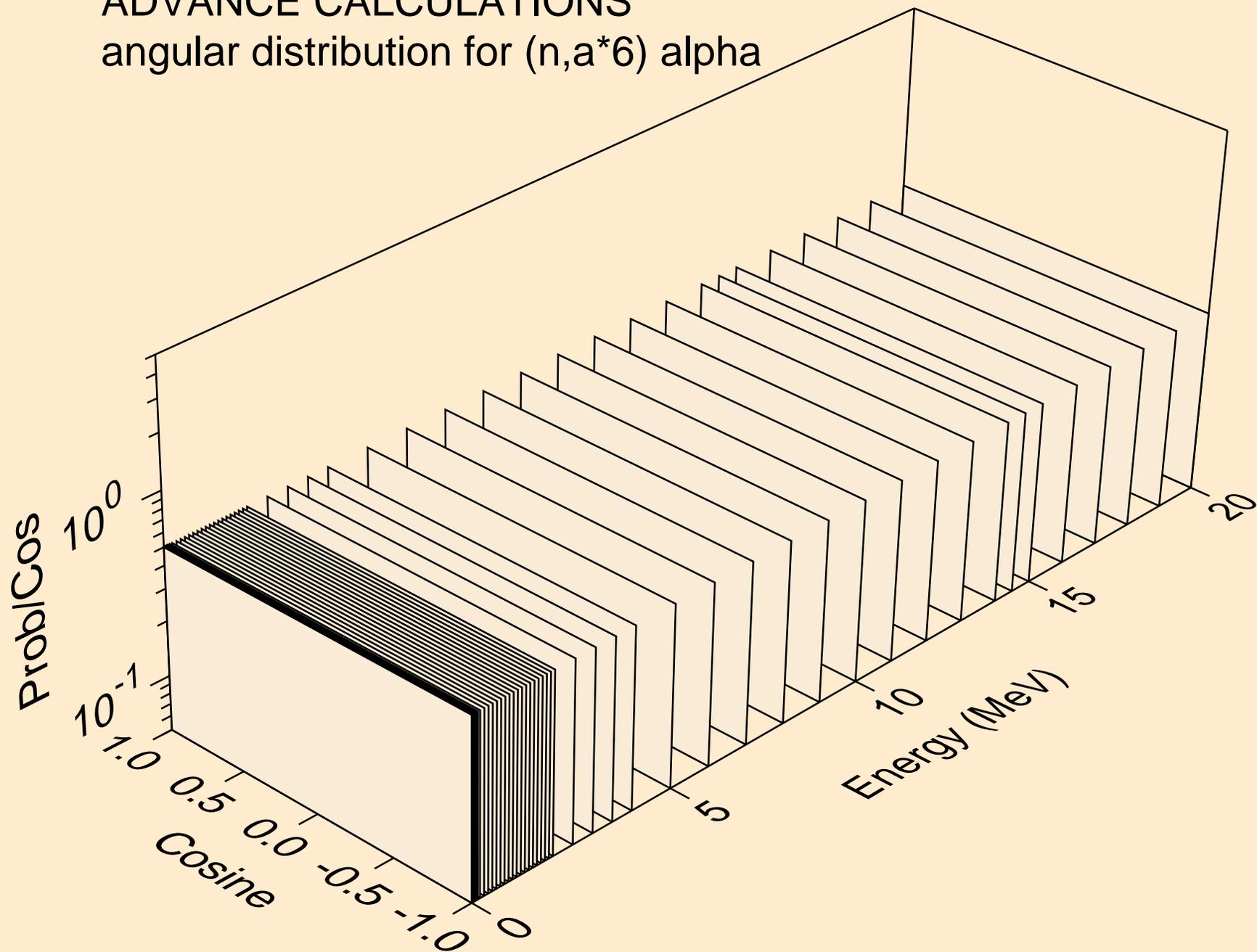


ADVANCE CALCULATIONS  
angular distribution for (n,a\*5) alpha

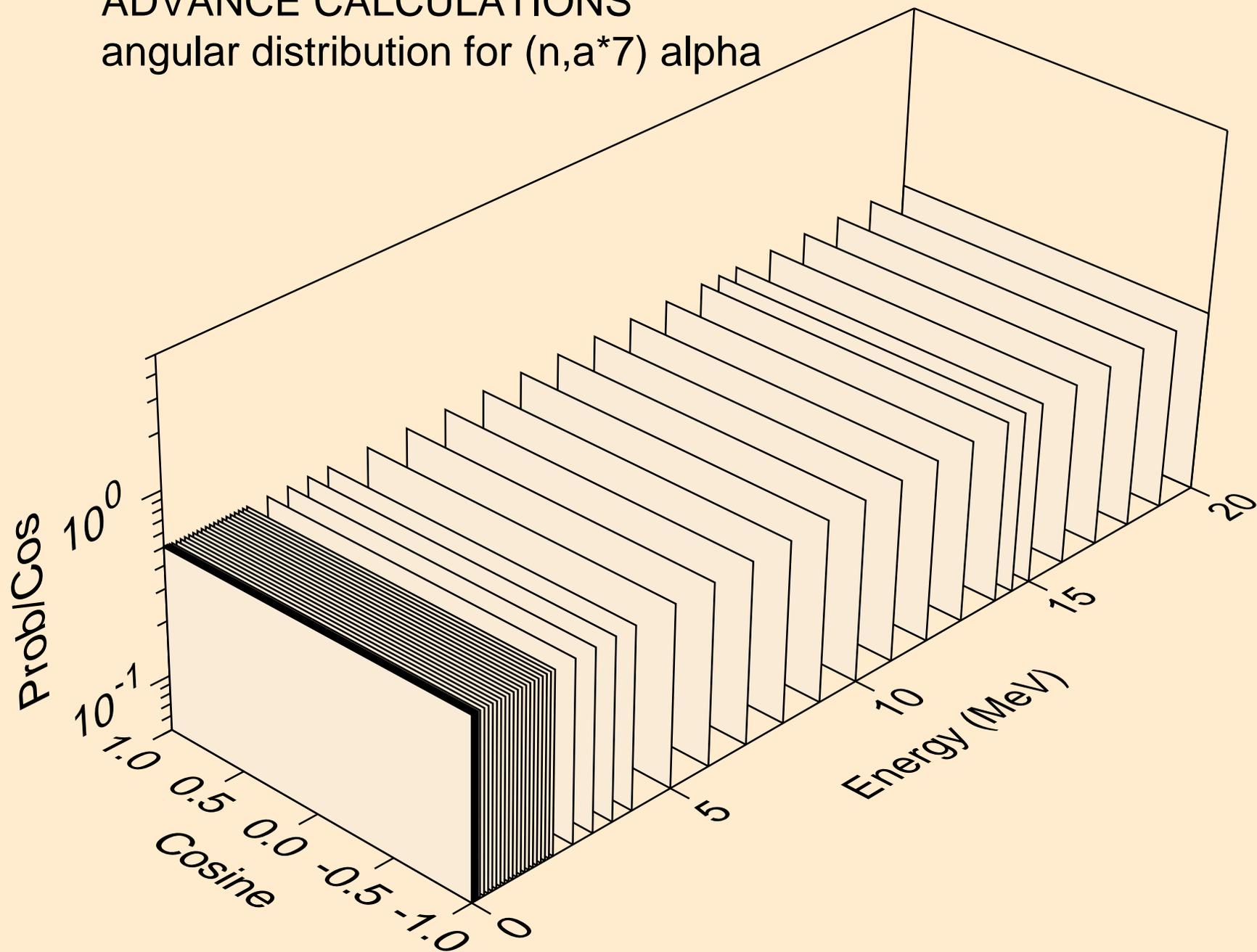


# ADVANCE CALCULATIONS

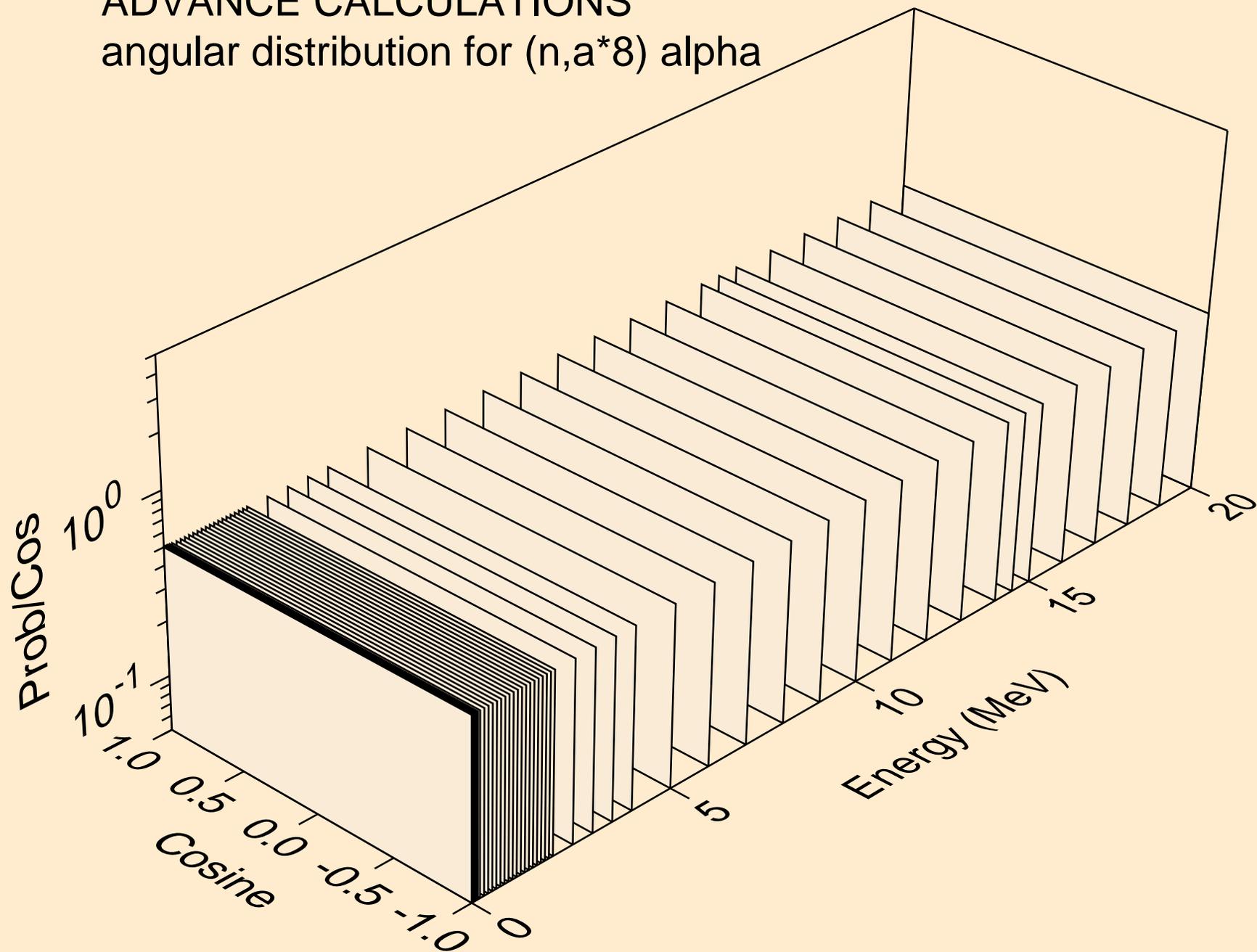
angular distribution for (n, $\alpha$ )



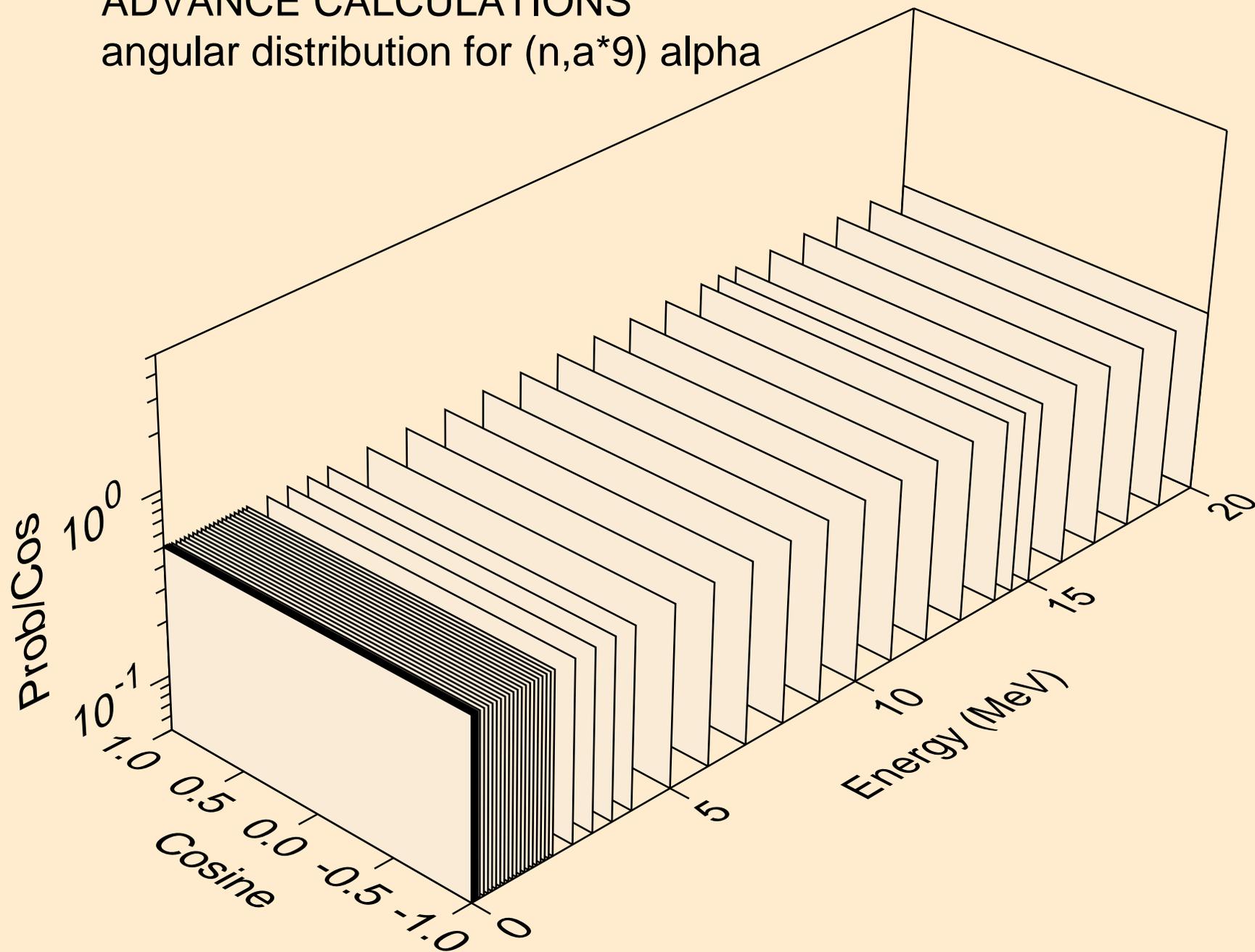
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ ) alpha



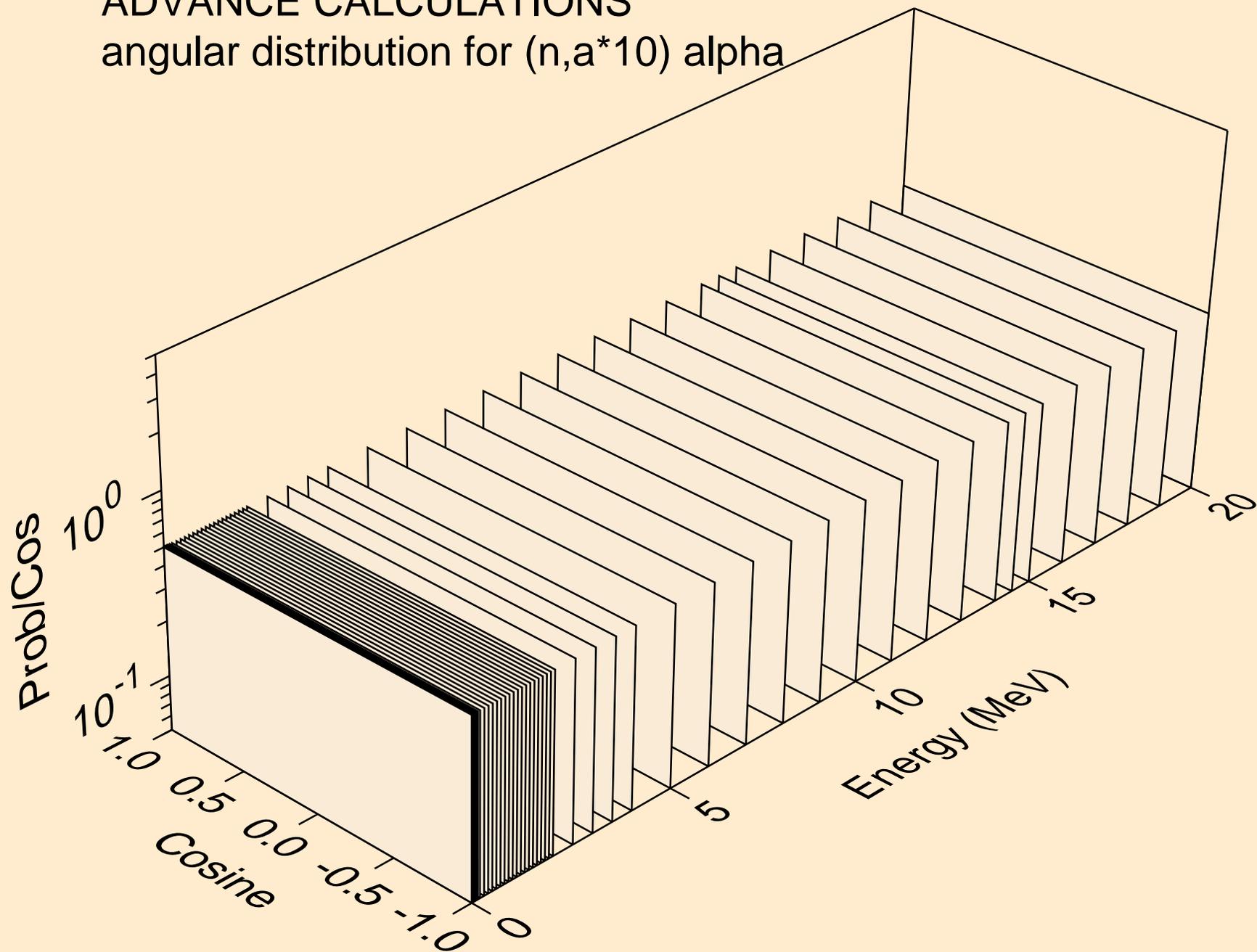
ADVANCE CALCULATIONS  
angular distribution for (n,a\*8) alpha



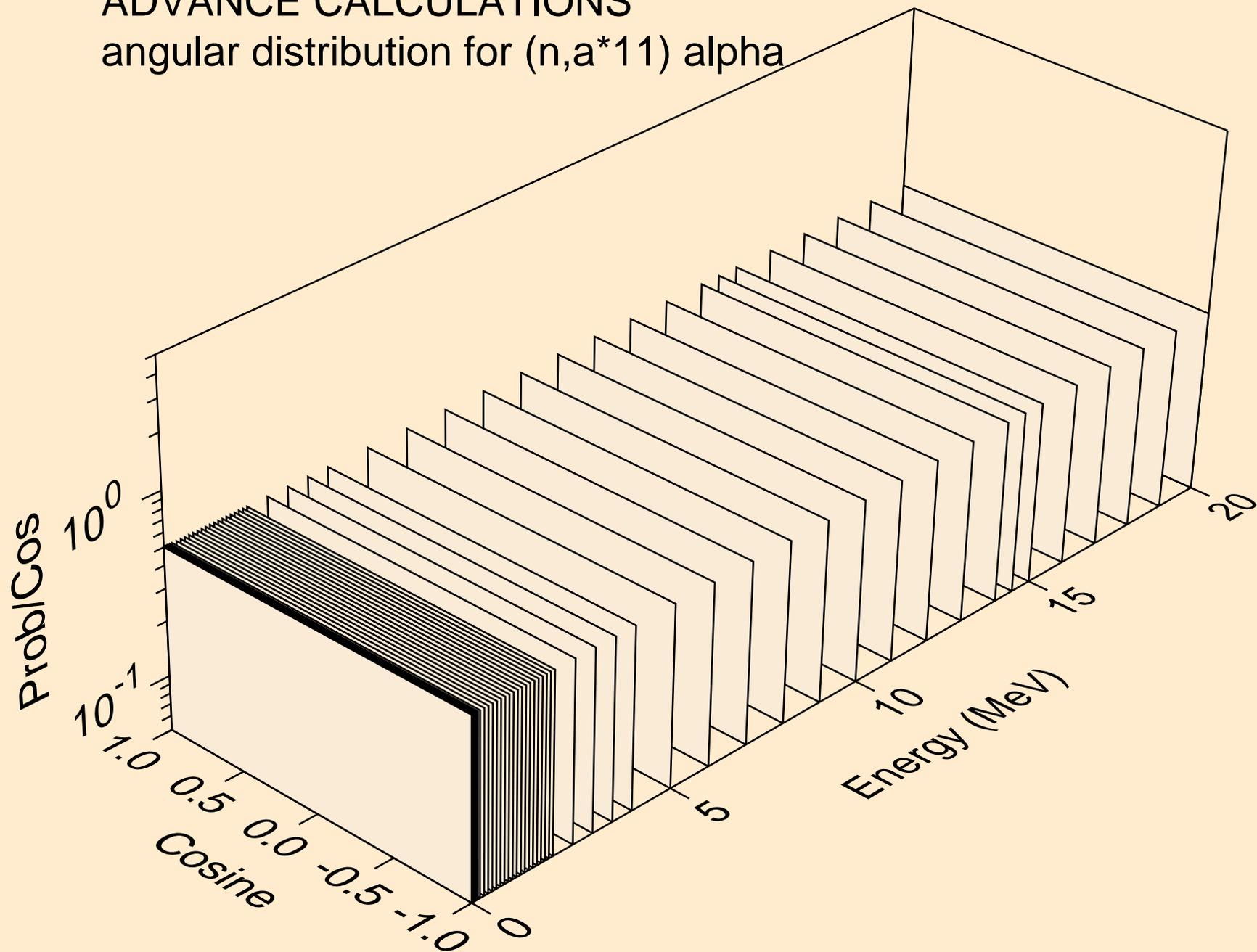
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ ) alpha



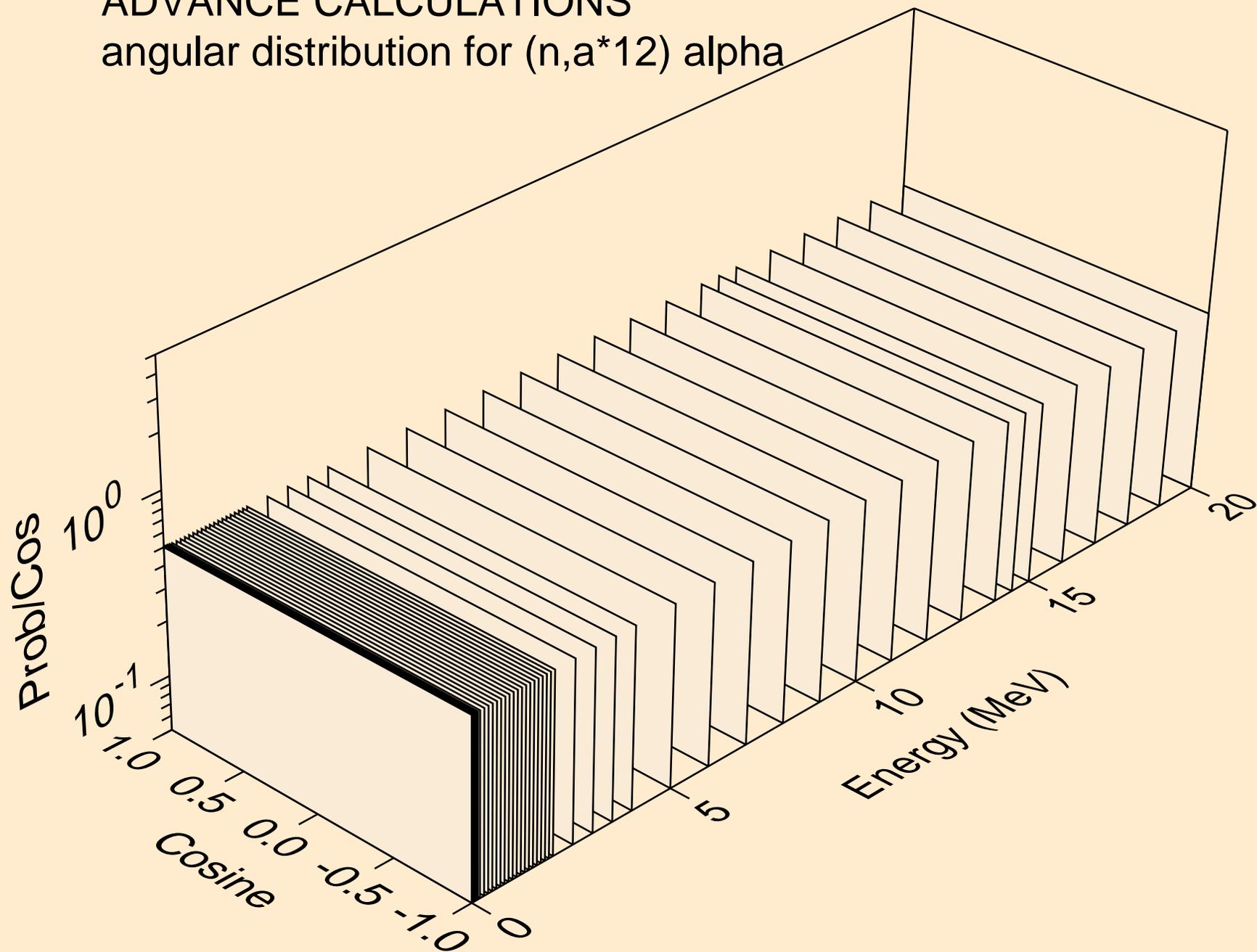
ADVANCE CALCULATIONS  
angular distribution for (n,a\*10) alpha



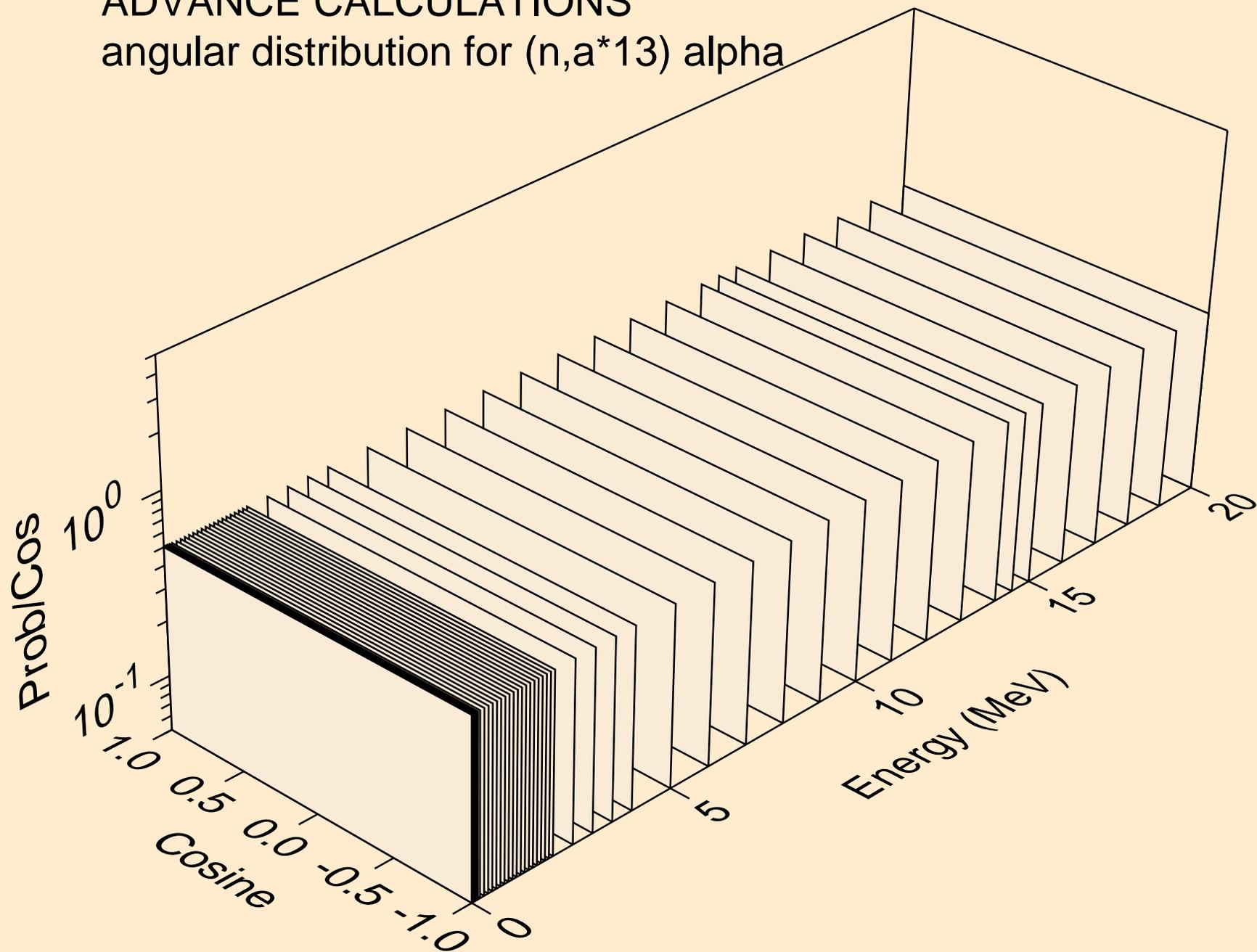
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*11) alpha



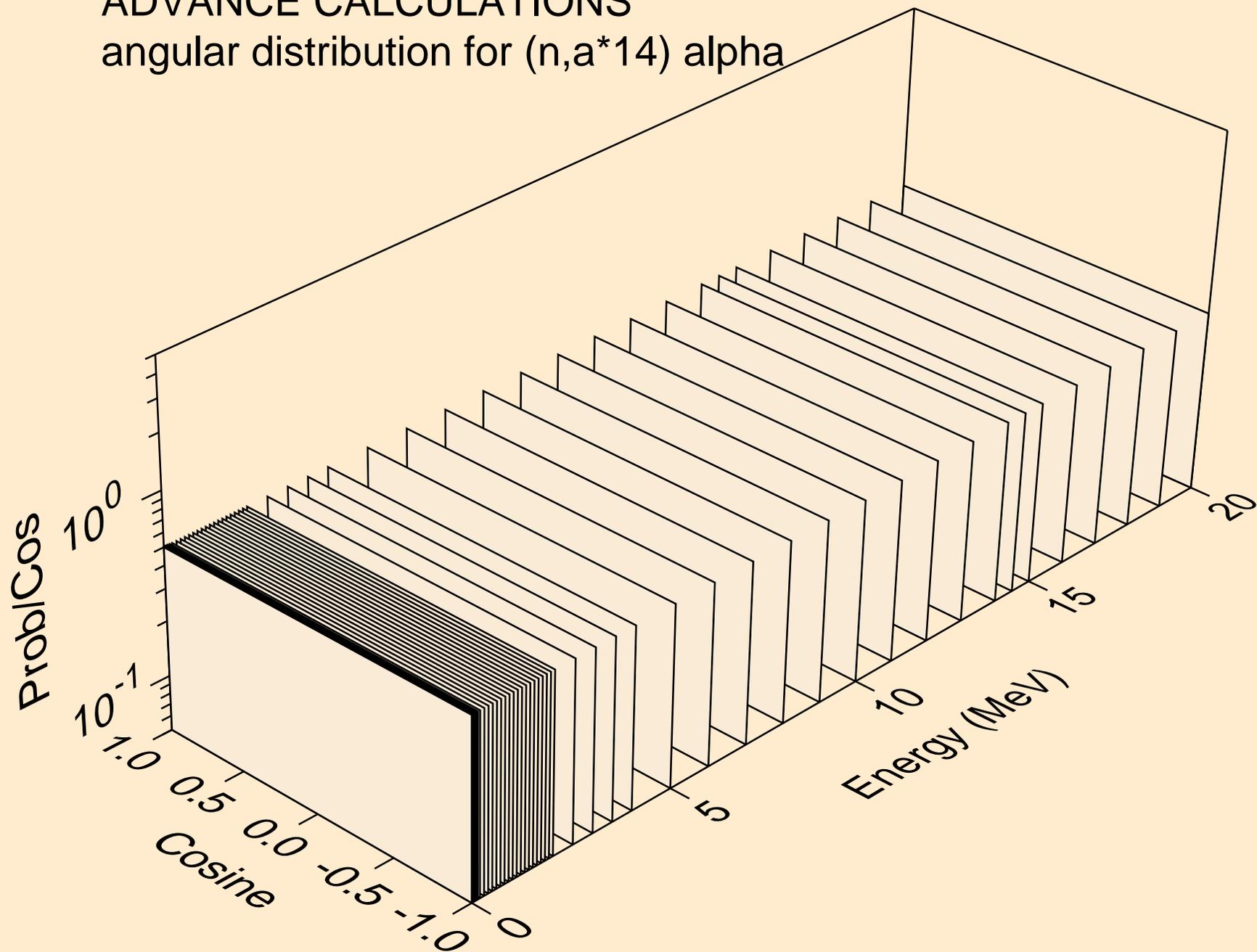
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*12) alpha



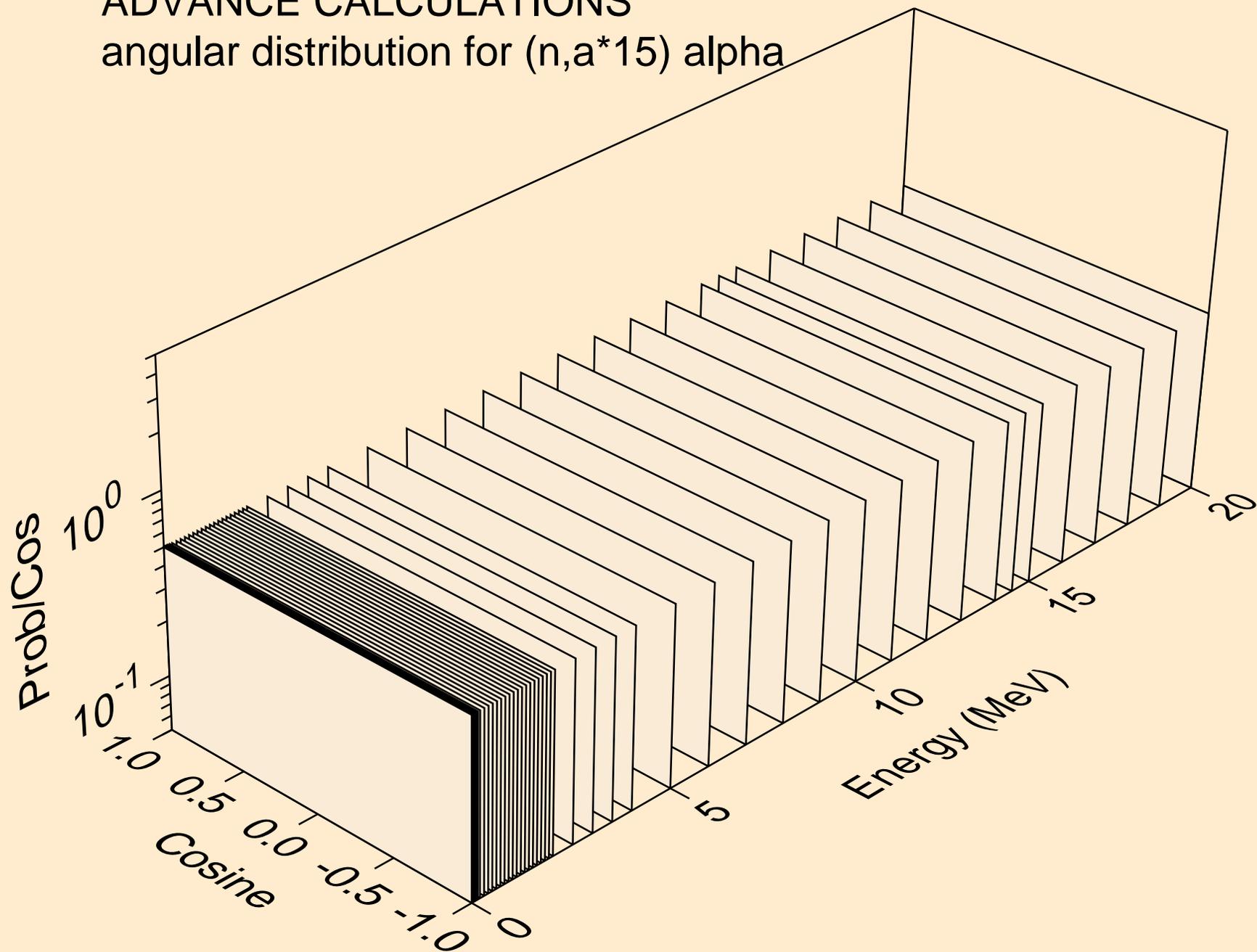
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*13) alpha



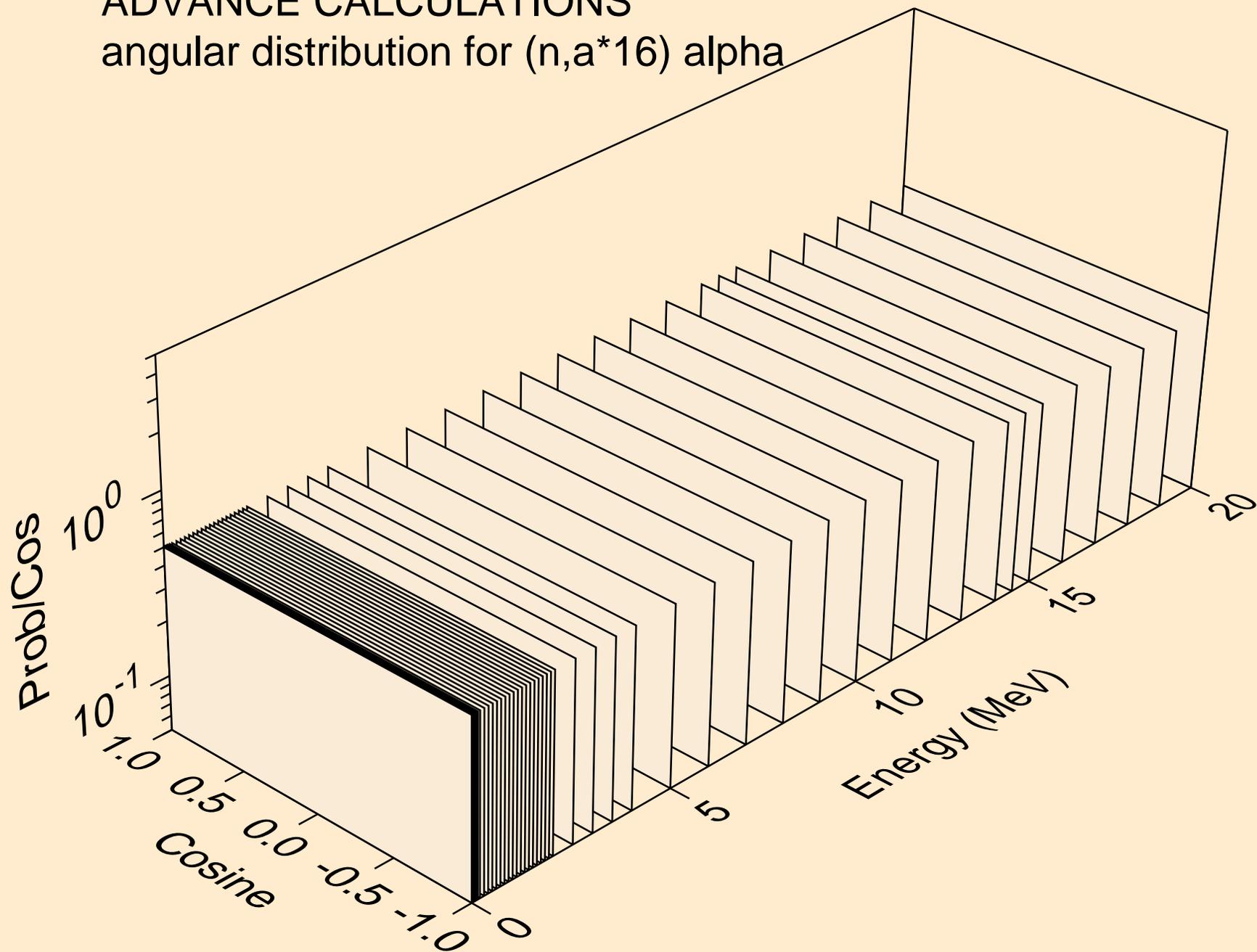
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*14) alpha



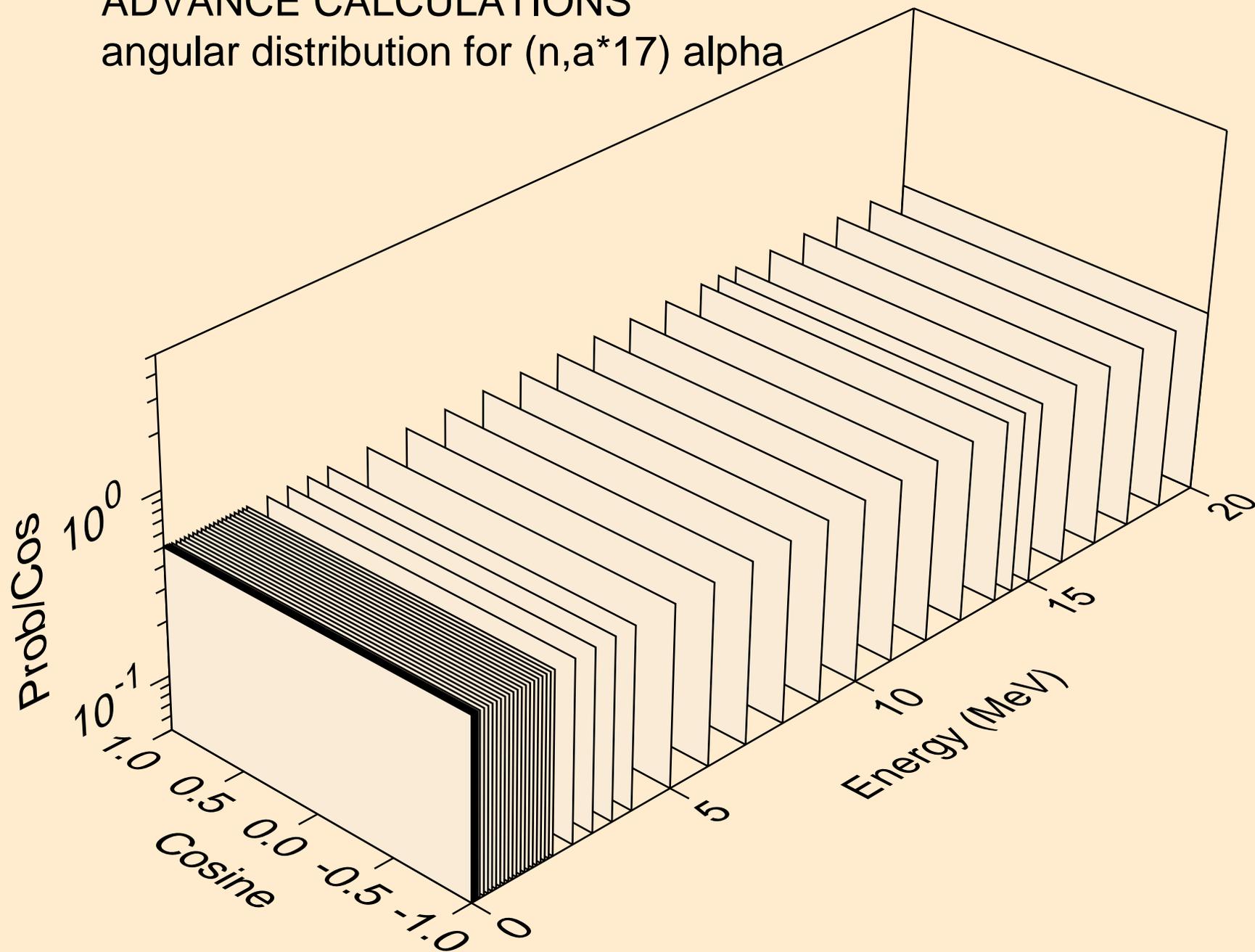
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*15) alpha



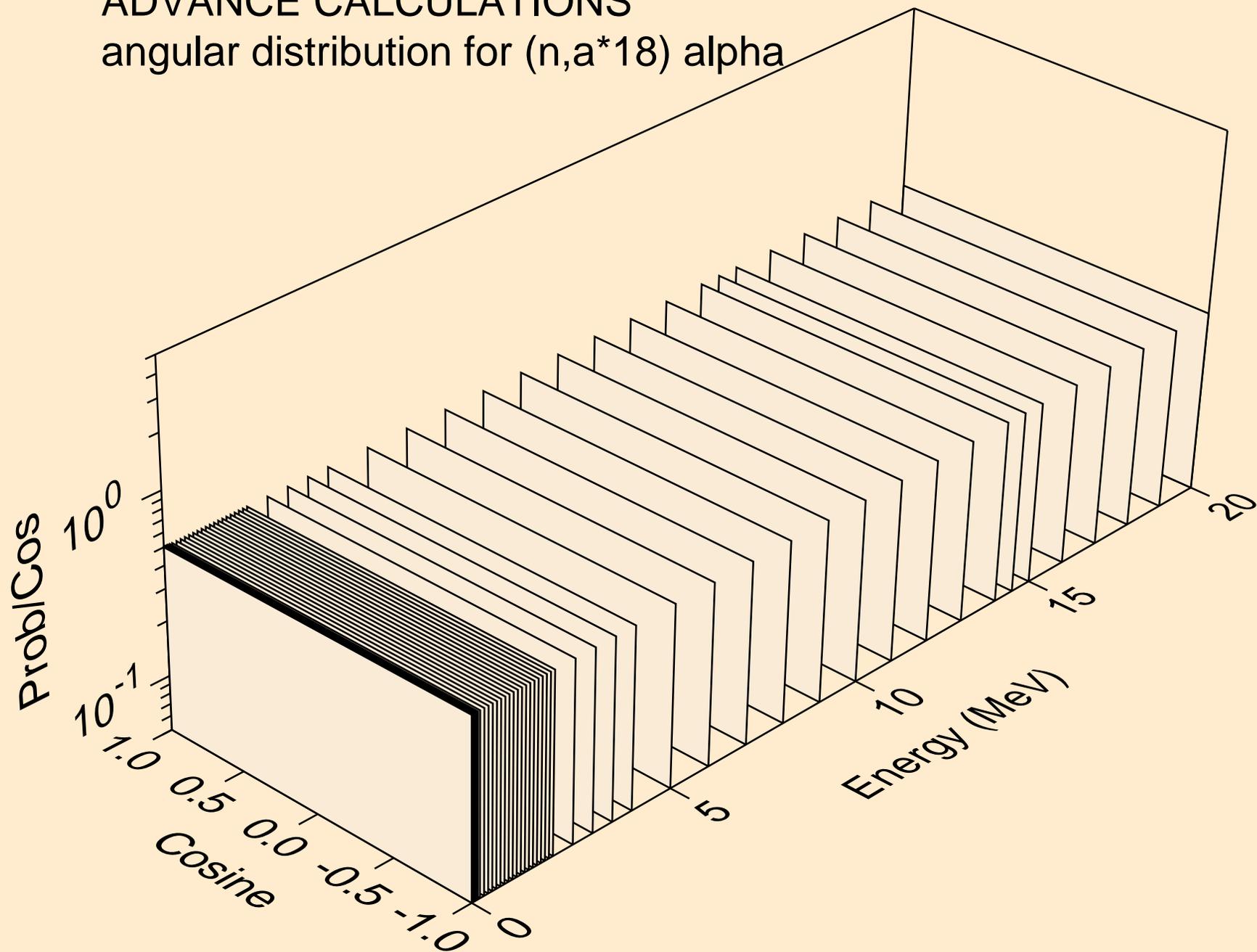
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*16) alpha



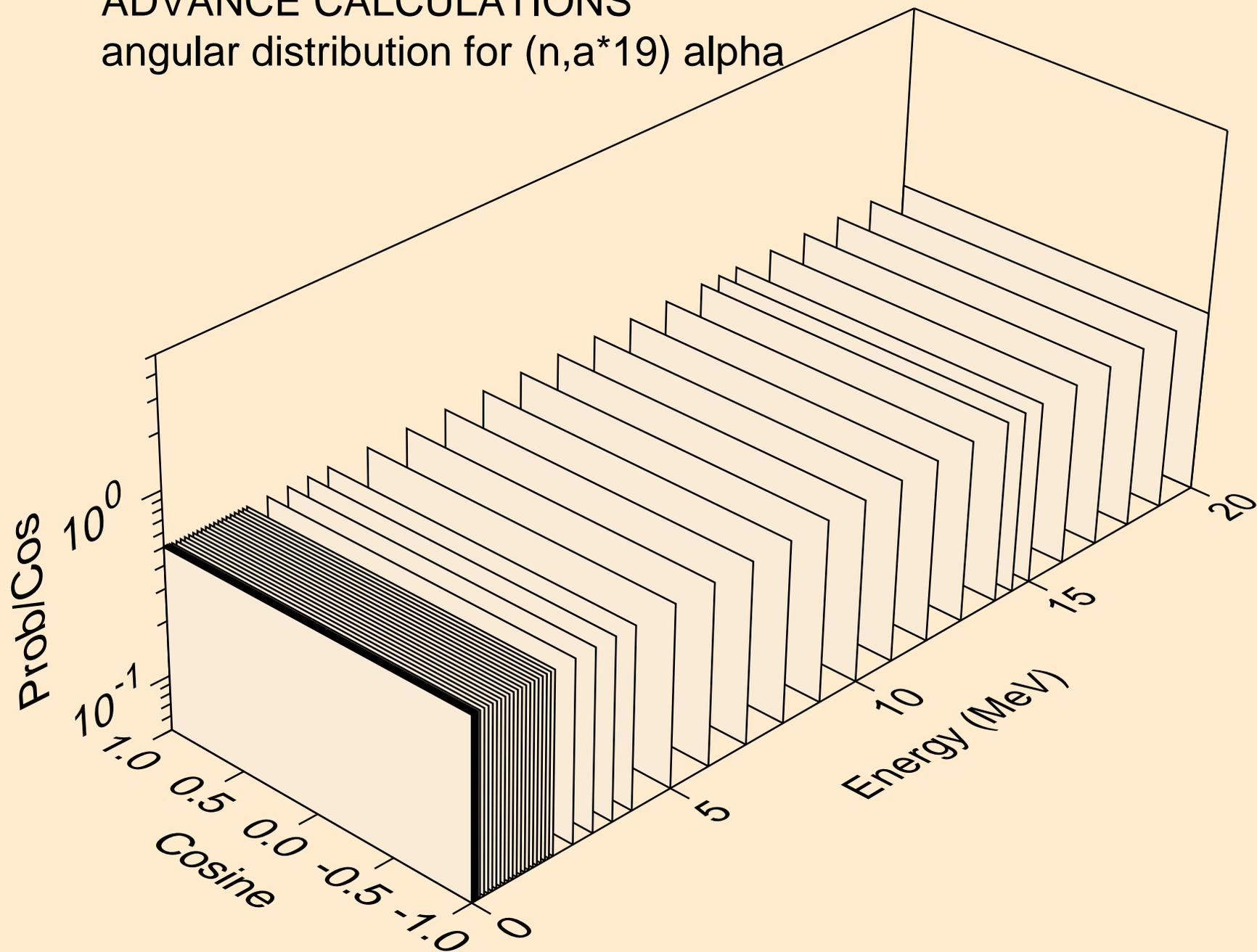
ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*17) alpha



ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*18) alpha



ADVANCE CALCULATIONS  
angular distribution for (n, $\alpha$ \*19) alpha



# ADVANCE CALCULATIONS

alphas from (n,a\*c)

